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Final Environmental Impact Statement for North Pinellas County, Florida Wastewater Facilities

(U.S.) Environmental Protection Agency
Atlanta, GA

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National Technical Information Service
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United States
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Region 4
345 Courtland Street, NE
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EPA

Environmental Impact Statement

Final

North Pinellas County, Florida Wastewater Facilities

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This Final EIS addresses proposed wastewater management facilities for northern Pinellas County, Florida. The major elements of the EIS include: (1) the development and evaluation of wastewater disposal alternatives for existing municipal wastewater treatment facilities, (2) the development and evaluation of wastewater management alternatives for the area east of Lake Tarpon, (3) the evaluation of the environmental effects and costs associated with the disposal of wastewater through a Gulf outfall, and (4) the evaluation of wastewater reuse in the study area.

Due to lack of approved wasteload allocations for most of Pinellas County's surface waters, a study area wide preferred alternative cannot be selected. EIS conclusions or recommendations that can be made include: (1) no federal action related to funding wastewater facilities east of Lake Tarpon, (2) the identification of wastewater reuse as the environmentally preferred wastewater management alternative for the study area, and (3) general findings related to the disposal of wastewater through a Gulf outfall near northern Pinellas County.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

SEP 20 1985

TO: ALL INTERESTED AGENCIES, PUBLIC GROUPS AND CITIZENS

Enclosed for your review and comment is the Final Environmental Impact Statement (EIS) for proposed wastewater facilities for northern Pinellas County, Florida.

This EIS was prepared in compliance with the National Environmental Policy Act (NEPA) and implementing Agency regulations. In accordance with these regulations, the Final EIS will be filed with EPA's Office of Federal Activities. Availability of the EIS will then be announced in the Federal Register, beginning a 30-day comment period. (The Federal Register date is the same as the date of this notice.) EPA will take no administrative action on this project until the close of the comment period.

Your review of this document and any comments you may have are appreciated. Please send all comments to Robert B. Howard, Chief, NEPA Compliance Section at the above address.

Final
Environmental Impact Statement
for
North Pinellas County, Florida

Prepared by

U.S. Environmental Protection Agency
Region IV
Atlanta, Georgia

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Comments and inquiries on this EIS should be directed to:

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AUG 14 1985
Date

U. S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV - ATLANTA

NORTH PINELLAS COUNTY, FLORIDA

ENVIRONMENTAL IMPACT STATEMENT

FINAL

SEPTEMBER 1985

EXECUTIVE SUMMARY FOR THE
ENVIRONMENTAL IMPACT STATEMENT FOR

NORTH PINELLAS COUNTY, FLORIDA
WASTEWATER FACILITIES

Draft ( )
Final (X)

Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

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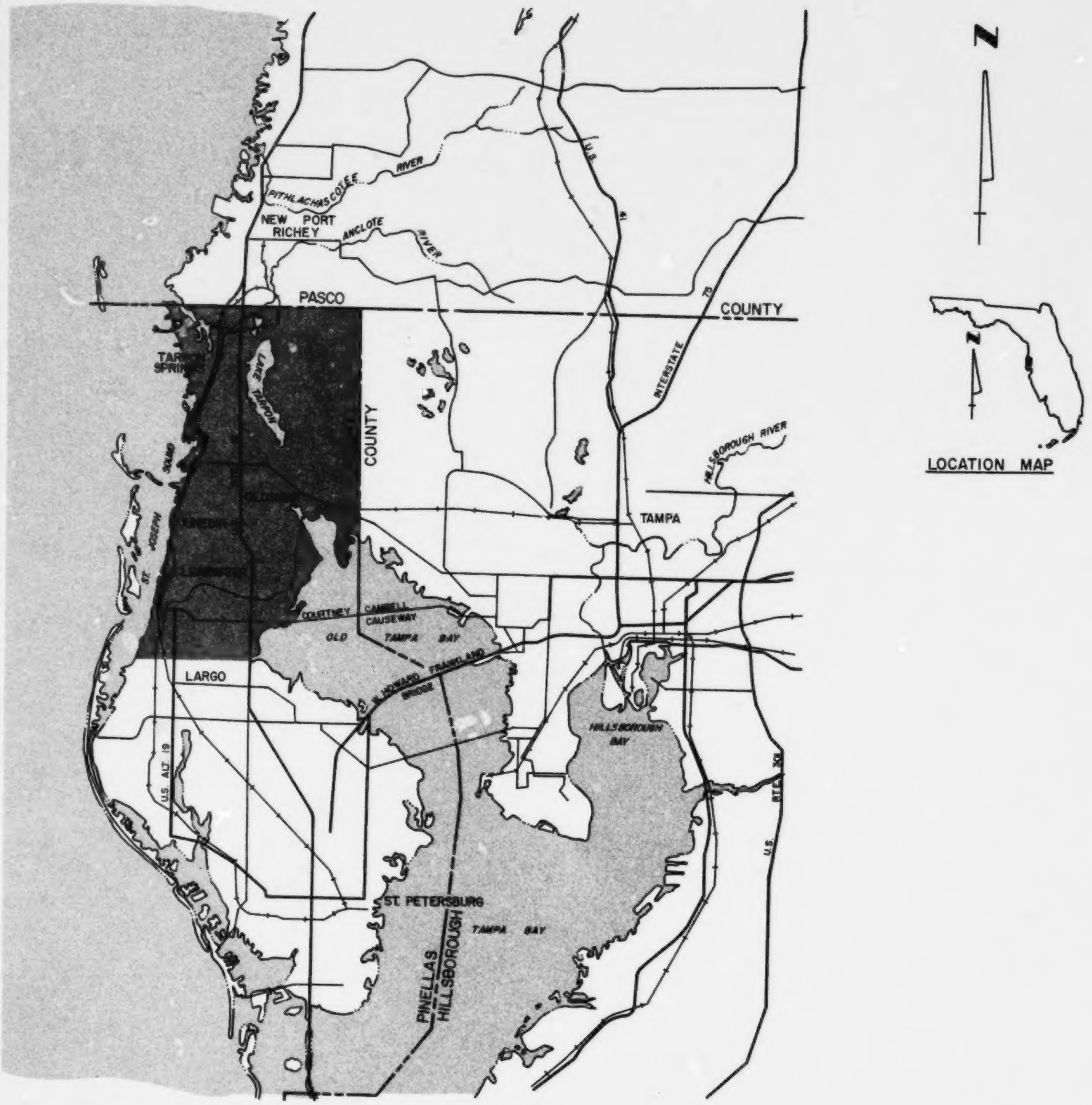
EXECUTIVE SUMMARY

PART A - NEED FOR ACTION

The Environmental Impact Statement (EIS) for North Pinellas County, Florida addresses alternative wastewater treatment-disposal systems and the potential impacts of these systems. The Study Area for the EIS includes the northern half of Pinellas County including all of the City of Clearwater and locations within the county north of Clearwater as shown on Figure 1.

Facilities planning for the EIS Study Area, based on Section 201 of the 1972 Federal Water Pollution Control Act, was accomplished through the North Pinellas County 201 Plan (which included areas within the County north of the City of Clearwater: Dunedin, Oldsmar, Tarpon Springs and unincorporated areas) and the Central Pinellas County 201 Plan (which included the Cities of Clearwater and Safety Harbor and areas further south). Recommendations of the 201 Plans are summarized in Table 1 and the service areas are shown on



NORTH PINELLAS COUNTY, FLORIDA
ENVIRONMENTAL IMPACT STATEMENT

STUDY AREA

5 0 5 10

SCALE IN MILES

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV ATLANTA, GEORGIA

FIGURE i

TABLE 1

WASTEWATER SERVICE AREAS IN THE NORTH PINELLAS COUNTY EIS STUDY AREA

Service Area	1984 Capacity (MGD) / 1984 Flow (MGD)$^{(3)}$	Year 2000 Projected Flows (MGD)$^{(3)}$	Current Wastewater Treatment Levels	Effluent Disposal: Current Method	Effluent Disposal: Method Recom. in 201 Plan
Clearwater					
East Plant	$\frac{5.0}{3.3}$	5.3	Secondary plus effluent filtration	Discharge to Old Tampa Bay, 650 ft. from shore	Deep-well injection near the treatment plant
Marshall St. Plant	$\frac{10.0}{6.3}$	8.6-10.0	Secondary plus nitrification	Discharge to Stevenson Creek to Clearwater Harbor	Deep-well injection near the treatment plant
Northeast Plant$^{(1)}$	$\frac{8.0}{4.6}$	12.0	Secondary (with filters being installed)	Effluent discharged through East Plant's outfall	Deep-well injection near East Plant in combination with East Plant
Dunedin					
Mainland Plant	$\frac{4.0}{3.3}$	5.5-7.0	Secondary	Discharge to St. Joseph Sound, 1000 ft. from shoreline	Gulf outfall
Oldsmar					
Oldsmar Plant	$\frac{1.0}{0.75}$	$4.5^{(2)}$-$7.5^{(2)}$	Secondary with nitrification	Evap.-perc. ponds	Spray irrigation as primary method; perc. ponds as backup method.

TABLE 1
(Continued)

Service Area	1984 Capacity (MGD) / 1984 Flow (MGD)(3)	Year 2000 Projected Flows (MGD)(3)	Current Wastewater Treatment Levels	Effluent Disposal: Current Method	Effluent Disposal: Method Recom. in 201 Plan
Pinellas County					
N. Pinellas Co. Plant	$\frac{3.0}{1.3}$	4.5-10	Secondary	Spray irrigation	Spray irrigation as primary method; Gulf outfall as backup method
Safety Harbor					
Safety Harbor Plant	$\frac{0.35}{0.11}$	Redirect flow to Clearwater N.E. Plant	Secondary	Redirect flow to Clearwater N.E. Plant	Redirect flow to Clearwater N.E. Plant
Tarpon Springs					
Tarpon Springs Plant	$\frac{1.25}{1.8}$	4.0	Secondary plus nitrification	Discharge to Anclote River	Spray irrigation as primary method; Gulf outfall as backup method
Area East of Lake Tarpon	$\frac{<0.5}{<0.5}$	3.5	Secondary (package plants) and on-lot systems	Holding pond and reuse on golf courses	Conveyance to Clearwater Northeast WWTP

(1) Includes Safety Harbor's flows

(2) Includes 3.5 MGD from unsewered area East of Lake Tarpon

(3) Based on most recent conversations with representatives from each service area.

Figure ii. All existing nearshore surface water discharges were to be replaced by several deep well injection and spray irrigation alternatives. A Gulf outfall was also recommended as both a primary and a back-up disposal method.

Review of the facilities plans raised substantive questions concerning the disposal options of deep well injection and a Gulf outfall, lack of wasteload allocations to area surface waters and the impact of sewering the environmentally sensitive area east of Lake Tarpon.

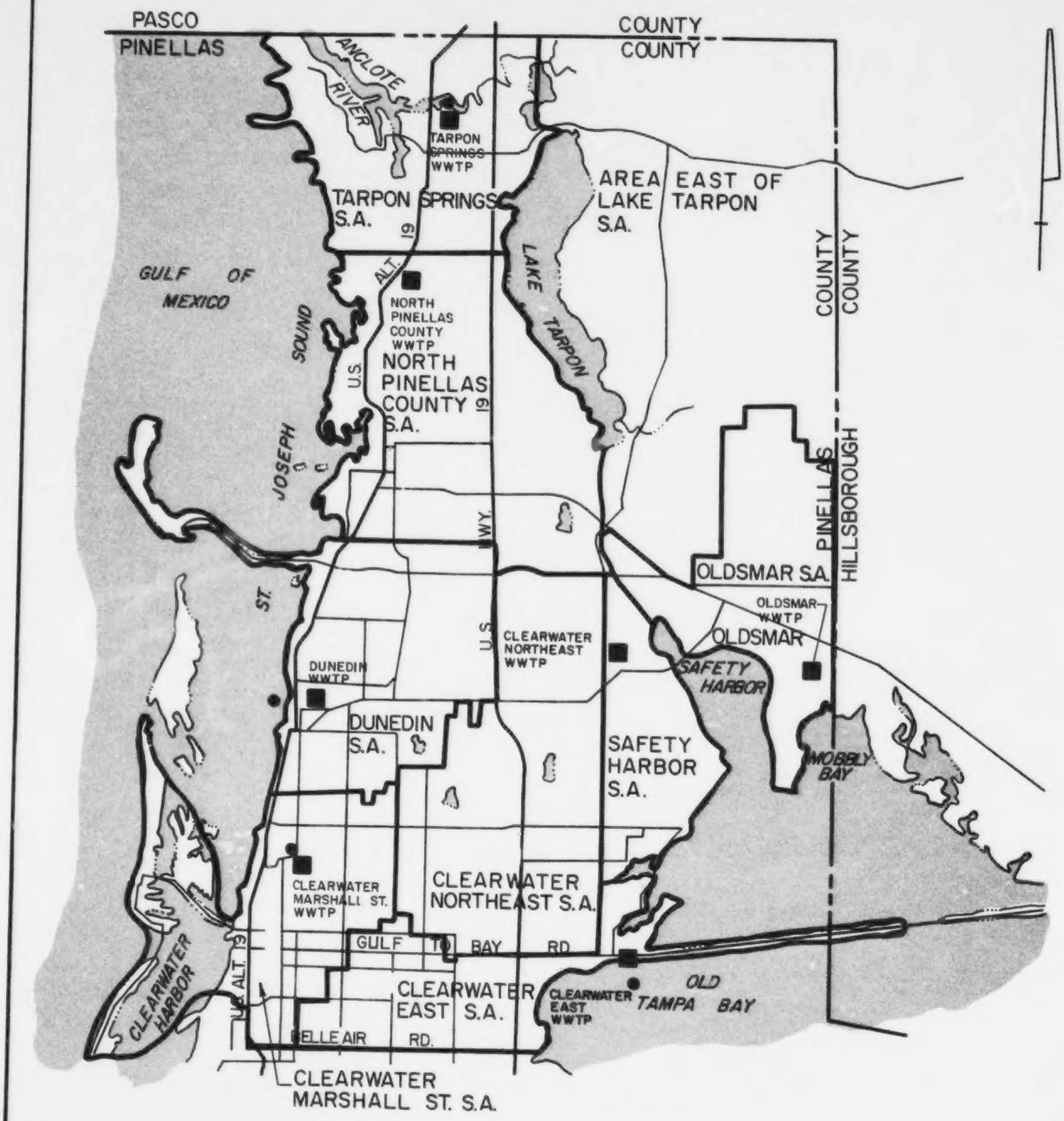
Based upon the concerns raised in the 201 Plans and through the review and scoping processes, the following issues were identified as the major elements of the EIS:

- Development and evaluation of wastewater disposal alternatives for the numerous municipal wastewater treatment facilities;
- Development and evaluation of wastewater management alternatives for the developing area east of Lake Tarpon;
- Evaluation of the environmental effects and costs associated with the disposal of wastewater through a Gulf outfall; and
- Evaluation of water conservation and wastewater reuse in light of existing groundwater supply limitations in the Study Area.

PART B - DEVELOPMENT AND EVALUATION OF ALTERNATIVES

Six basic wastewater disposal alternatives were evaluated for the existing municipal facilities:

- Discharge to coastal waters (Old Tampa Bay, Clearwater Harbor-St. Joseph Sound or the Anclote River);



LEGEND

S.A.	SERVICE AREA
WWTP ■	WASTEWATER TREATMENT PLANT
●	SURFACE WATER DISCHARGE POINT

SOURCES: 1. PINELLAS COUNTY SEWER SYSTEM FEBRUARY 1979

2. OLDSMAR-PINELLAS COUNTY AGREEMENT DECEMBER 1979

NORTH PINELLAS COUNTY, FLORIDA
ENVIRONMENTAL IMPACT STATEMENT

MUNICIPAL WASTEWATER SERVICE AREAS

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION IV ATLANTA, GEORGIA

FIGURE ii

- A Gulf outfall extending from Clearwater Beach Island, Honeymoon Island or the mainland north of Honeymoon Island;
- Deep well injection at the Marshall St. Plant or south of the Study Area possibly at the County's McKay Creek Wastewater Treatment Plant and injection site;
- Slow rate (spray irrigation) or rapid rate (rapid infiltration) land application;
- Wastewater reuse of nonpotable wastewater for irrigating recreational or other open land areas and industrial cooling and service water; and
- The No Federal Action (no-action) alternative.

The service areas and the basic disposal options were combined to form individual, sub-regional (2 or more service areas combined) and regional (all seven service areas combined with a total projected flow for the year 2000 of 43 million gallons of wastewater per day (MGD)) disposal alternatives. These alternatives were screened with some being eliminated because of cost or environmental reasons.

1) Cost Analysis

(a) Tampa Bay Subarea Cost Summary

The Old Tampa Bay Subarea involves facilities (Oldsmar, Clearwater Northeast, and Clearwater East) with proposed discharges to Upper Old Tampa Bay (north of the Courtney Campbell Causeway) or Lower Old Tampa Bay (south of the Causeway). The general findings of the cost analysis are summarized below:

- The individual service area disposal options with a surface water discharge treated to secondary levels with no outfall extension are least costly;

- Regional and sub-regional options are more costly than individual options;
- A sub-regional alternative combining all facilities for a discharge to Lower Old Tampa Bay at secondary treatment levels is the least costly non-individual service area option;
- Reuse plus secondary treatment and filtration is cost competitive with regional Gulf outfall and deep well injection options; and
- The regional Gulf outfall option (with secondary treatment and with the outfall located four miles offshore from Honeymoon Island) is cost competitive with the regional deep-well injection option.

(b) Clearwater Harbor - St. Joseph Sound Subarea Cost Summary

The Clearwater Harbor - St. Joseph Sound Subarea includes the Clearwater Marshall Street and Dunedin treatment plants. General findings of the cost analysis are summarized as follows:

- The individual service area disposal options with a surface water discharge are least costly;
- Reuse plus secondary treatment and filtration are less costly than regional Gulf outfall or deep well injection options; and
- The regional Gulf outfall option is cost competitive with the regional deep well injection option (but at a higher level of costs than the individual service area options).

(c) North Pinellas County Subarea Cost Summary

Rapid rate land application as an individual disposal option is the least costly alternative.

(d) Tarpon Springs Subarea Cost Summary

The Tarpon Springs wastewater service area is the Tarpon Springs Subarea. The Anclote River has been assigned a wasteload allocation by the Florida Department of Environmental Regulation (DER). Discharge of wastewater, treated to advanced secondary treatment (AST) levels, is the least costly disposal option that is judged environmentally acceptable. Some of the unincorporated area northeast of Lake Tarpon may also be served by the Tarpon Springs Wastewater Treatment Plant.

(e) Area East of Lake Tarpon

A range of alternatives including on-lot and community systems, land application and a centralized sewer system were considered for this area. The costs for on-lot and small community systems are based on an analysis of three planned residential communities east of Lake Tarpon. The costs are for existing residences and capacity for future growth. Annual user costs for screened alternatives are:

Treatment Alternative	Annual User Cost
Community Sand Mound-Septic Tank effluent pump system	$386
Land application following secondary treatment	$393
Centralized system with treatment at Oldsmar WWTP	$400

2) Evaluation of Non-Monetary Factors

The alternatives also were evaluated on the basis of expected environmental impacts (with emphasis on aquatic environment, public health and recreation), operability constraints and implementability limitations.

Implementability, operability, and environmental impact factors for the five basic disposal options (excluding the no-action alternative) are presented in Table ii.

The expected environmental impacts, operability constraints and implementability limitations for the area east of Lake Tarpon are summarized in Table iii.

PART C - CONCLUSIONS

In the absence of approved wasteload allocations for area surface waters (except the Anclote River), EPA can not, in this EIS, select a preferred alternative for wastewater disposal for all of North Pinellas County. The EIS must instead be viewed as providing input to the Florida DER in their wasteload allocation decisions and to local agencies for their wastewater management decisions. The EIS can serve the purpose of narrowing the field of reasonable alternatives; presenting the costs associated with various effluent limitation combinations; and identifying expected environmental impacts, operability constraints and implementability limitations associated with the alternatives. The identification of the most cost effective, environmentally sound disposal alternative that would be eligible for EPA funding can not be accomplished until the wasteload allocation process is completed. An environmentally preferred alternative of wastewater reuse can, however, be identified in the EIS. Additionally, decisions concerning EPA's role in wastewater management east of Lake Tarpon are not dependent on wasteload allocations and therefore can be described in the EIS.

Decisions have already been made concerning the Tarpon Springs discharge to the Anclote River, because wasteload allocations have been established and approved. Further decisions concerning Tarpon Springs are not necessary.

Decisions in the North Pinellas service area can be made independently of wasteload allocations. Land application of treated wastewater on-site or at the Innisbrook Country Club is the most cost-effective, environmentally sound disposal option regardless of the level of treatment provided prior to any surface water discharge option.

TABLE ii

IMPLEMENTABILITY, OPERABILITY AND ENVIRONMENTAL IMPACT FACTORS OF BASIC DISPOSAL OPTIONS

Option	Implementability/Operability	Environmental Impacts
Discharge to Coastal Waters	Approved wasteload allocations for discharges are unavailable. Wastewater discharges are constrained because all Pinellas County waters are state designated Outstanding Florida Waters and Class II (shellfish harvesting) waters.	Water quality impacts (and impacts on beach use, grass beds, aquatic ecosystem, etc.) determined by quality of effluent discharged (continued degradation is expected with secondary treatment levels and improvement with AWT). Non-point source controls in some waters may be needed for further water quality improvements.
Gulf Outfall	Public acceptability is uncertain. No Gulf outfalls currently exist in Region IV. Outfall operation is proven technology.	Construction: 12 acres of bottom habitat potentially altered or destroyed per mile of pipeline. Outfall corridor could be sited to minimize construction impacts. Operation: Benthic community within 100-200 feet of discharge would be altered. Potential for beaches, reefs and other sensitive areas to be impacted. Estuarine water quality would be improved by removal of near shore surface water discharges.
Deep Well Injection	Was first thought not viable at Clearwater East Plant site. Funding for additional testing is being sought by Clearwater. Proven to be implementable south of the Study Area. May be viable in southwest section of Clearwater. 28 month testing program required for new disposal sites.	Estuarine water quality would probably improve. Could help retard saltwater intrusion into potable aquifer zones.

TABLE ii

IMPLEMENTABILITY, OPERABILITY AND ENVIRONMENTAL IMPACT FACTORS OF BASIC DISPOSAL OPTIONS

Option	Implementability/Operability	Environmental Impacts
Land Application	Land availability, zoning changes and land cost are implementation issues. Under-drains may be required in many areas because of high groundwater table. Back-up disposal method and/or large retention capacity is needed.	Surface water quality would improve. Land use alteration and conversion could occur. Wildlife habitat could be altered. Potential groundwater recharge advantages.
Non-potable Reuse at parks, golf courses and other lands	Proven to be implementable in neighboring St. Petersburg. Costs are usually higher than other disposal alternatives. Back-up disposal method is needed. Land availability is an issue.	Limited area groundwater supplies could benefit by both conservation and reuse. Potential health risk if reuse system is not secured from casual human contact with wastewater. Reduced surface water discharges would potentially result in water quality improvements.

TABLE iii

COMPARATIVE FEATURES OF WASTEWATER MANAGEMENT ALTERNATIVES FOR THE AREA EAST OF LAKE TARPON

Alternative	
Sand-Mounds with STEP Systems	1) No surface water discharge 2) Minimal public health concerns with properly functioning systems 3) Terrestrial ecosystem impacts minimal 4) Without centralized systems, densities may be decreased resulting in reduced impacts on wetlands, flood-prone areas, recharge areas 5) Low cost alternative 6) Malfunctions could result in public health, recreation and odor impacts 7) Shallow groundwater supplies could be affected by nitrate increases 8) Soil suitability limited to southern portion of area east of Lake Tarpon
Package Plants with land application	1) No surface water discharge 2) Minimal public concerns with properly functioning systems 3) Same as 4) above 4) Existing developments are using this technique now 5) Low cost alternative 6) Open space would be maintained for Land Application and other uses 7) Same as 6) above 8) Same as 7) above 9) Storage or back-ups required for wet weather periods 10) Large portions of potentially developable land are required for land application 11) Some vegetation removal required
Centralized System with Treatment at Oldsmar WWTP	1) No groundwater concerns 2) No operability constraints 3) High cost alternative when disposal costs are added

TABLE iii (Cont'd.)

COMPARATIVE FEATURES OF WASTEWATER MANAGEMENT ALTERNATIVES FOR THE AREA EAST OF LAKE TARPON

Alternative	
Centralized System with Treatment at Oldsmar WWTP (Cont'd.)	4) Wasteload allocations do not exist for surface waters 5) Increased nutrient/BOD_5 load to Old Tampa Bay could result in water quality degradation 6) Potential public health/recreation impacts with discharge 7) Centralized system would support dense development in area's wetlands, floodprone areas, recharge zones; nonpoint source loads to Lake Tarpon could increase 8) State law and regulations constrain surface water discharges

The alternatives involving discharge into Old Tampa Bay, Clearwater Harbor and St. Joseph Sound can undergo no further screening by EPA at this time. Additional definitive decisions can not be made until wasteload allocations for those water bodies are available.

Existing wastewater management methods east of Lake Tarpon include septic tank - absorption field systems at individual homes and private package plants that serve planned community developments. Wastewater from the package plants is disposed via land application of effluent within that development. With proper maintenance and sufficient acreage, this practice has apparently been successful. Water quality or public health problems associated with these existing systems have not been documented.

The thrust of facilities planning east of Lake Tarpon is toward the provision of facilities for future population, not the existing population. In this regard, the selection of EPA's funding decision is primarily dictated by two factors.

First, the area East of Lake Tarpon contains many sensitive environmental features that could be potentially impacted by continued development. The area is drained by Brooker Creek, a major drainage basin of Lake Tarpon. This tributary system is composed of a network of wetlands and floodplains that comprise approximately 33 percent of the area east of Lake Tarpon. Much of the area is also a groundwater recharge zone which is critical to the long-term viability of the area's groundwater supply. One of the area's major public water supply well fields is located in this portion of the study area. EPA's participation in funding facilities to support development that would adversely affect these sensitive environmental features is limited by both policy and regulation.

Secondly, EPA's Construction Grants Regulations allow the agency to fund facilities only to serve capacity for flows existing on the date of Step 3 grant award, but not to exceed 1990 flows. Since the focus of these alternatives is to serve future development, the Agency's funding role in the area east of Lake Tarpon is limited.

PART D - RECOMMENDATIONS

1) Wastewater Reuse

The wastewater reuse alternatives for each service area are hereby identified as the environmentally preferred disposal alternative. Reuse is the only management option that responds to the area's surface water quality problems while addressing ground water supply limitations. The costs, advantages, and disadvantages are clearly outlined to the community and local decision makers. The need for a wet weather backup for wastewater that cannot be reused is likely to exist. Potentially feasible backup options include continued but intermittent surface water discharges or deep well injection.

In general terms, the cost of wastewater reuse represents an additional $41 to $48 million beyond the costs associated with surface water disposal options at AWT and secondary treatment levels, respectively for all seven treatment plants. These costs do not recognize any value for the recycled wastewater or the reduced costs associated with lesser needs for potable supplies.

It should be noted that this recommendation is to identify the environmentally preferred alternative, is not necessarily the "EPA fundable" alternative. The "EPA fundable" alternatives for both the Clearwater Harbor - St. Joseph Sound and Old Tampa Bay Subareas will be selected upon completion of the wasteload allocation process. Additionally, identification of the environmentally preferred alternative does not preclude the consideration of other disposal options (e.g., deep well injection or intermittent surface water discharges). Deep well injection is a disposal option that had been considered as both a primary and backup disposal option. Local agencies may wish to pursue further deep well investigations to determine its feasibility as a disposal option and its relationship to a reuse alternative.

2) Tarpon Springs Subarea

Discharge to the Anclote River of advanced secondary treated (AST) effluent is the recommended alternative for Tarpon Springs, in accordance with the approved wasteload allocation.

3) North Pinellas Subarea

Land application at the existing site and the Innisbrook Country Club has been shown to be the most cost-effective, environmentally sound option available. Regardless of wasteload allocations, land application is the recommended alternative for the North Pinellas Subarea.

4) Clearwater Harbor - St. Joseph Sound Subarea

In the absence of wasteload allocations for this sub-area, numerous alternatives remain viable for the Dunedin and Marshall Street service areas. The information from the EIS process is available to the state for use in their decisions. Upon completion of the wasteload allocation process, the most cost-effective environmentally sound option for funding eligibility can then be selected.

5) Old Tampa Bay Subarea

In the absence of wasteload allocations for this subarea, numerous alternatives remain viable for the Clearwater East, Clearwater Northeast and Oldsmar service areas. The information from the EIS process is available to the state for use in their decisions. Upon completion of the wasteload allocation process, the most cost-effective environmentally sound option for funding eligibility can then be selected.

6) Area East of Lake Tarpon

EPA's policy and regulations concerning funding facilities in environmentally sensitive areas and funding capacity for future flows do not allow funding assistance in the area east of Lake Tarpon. The reasonable alternatives have been evaluated in terms of cost, impact, reliability and implementability. This information is available to the County and private developers for local decision-making.

EPA also encourages governing bodies within the Study Area to consider the function and value of environmentally sensitive undeveloped areas east of Lake Tarpon (i.e., groundwater recharge areas, wetlands, floodplains) in future planning and development decisions.

EPA's Construction Grants regulations allow the Agency to fund facilities only to serve capacity for flows existing on the date of Step 3 grant award, but not to exceed 1990 flows. Since the basis for many of the alternatives for the area east of Lake Tarpon is to serve future development and not to correct existing water quality or public health problems, the EPA will not participate in funding wastewater facilities in this area.

7) Gulf Outfall

As part of this EIS, a Marine Measurement and Sampling Program was conducted during 1980 to better define existing environmental and physiographic conditions in the nearshore Gulf of Mexico off northern Pinellas County. The data collected during the sampling program were utilized to assist in evaluating the Gulf outfall wastewater disposal alternative and to generically demonstrate the methodology that should be used in considering a Gulf outfall. The general findings related to a Gulf outfall from northern Pinellas County are as follows:

- It would provide the area with a reliable long-term wastewater disposal option;
- It would require a major investment of capital in a disposal option that would tend to discourage the environmentally preferred alternative of wastewater reuse;
- It would involve the environmental tradeoffs of minimizing impacts to estuarine waters while increasing impacts to the Gulf (i.e., bottom disruption and community alteration, attractant to fish and other organisms causing impacts, nutrient impact);
- It would remove a development constraint that would potentially promote higher density development and development

in environmentally sensitive areas which are not suitable for on-lot or recycle wastewater management;

- Secondary treatment and disinfection of wastewater would be necessary to minimize adverse impacts of an outfall on local beaches;
- Station 3F which is roughly four miles offshore from Honeymoon Island was selected for additional study to further demonstrate the generic methodology for evaluating the Gulf outfall alternative. The area of Station 3F was found to be less environmentally sensitive than other sites located closer to shore that were evaluated during the Marine Sampling Program;
- Station 3F appears to be more cost effective than other stations evaluated during the Marine Sampling Program based on estimated cost and combined impacts to public health, the St. Joseph Sound estuary and natural hardbottom reef habitat;
- Nearshore Gulf currents vary such that predictions of effluent movement from a discharge are uncertain. Dye discharged in the area of Station 3F during the Marine Sampling Program generally moved in a south-southwesterly direction. A discharge plume in the area of Station 3F would be expected to have minimal impact on the area's beaches;
- Any further consideration of discharge sites near Station 3F should focus on areas slightly north of the exact study location to further minimize potential impacts to usage of the Dunedin Artificial Reef;
- A precise outfall alignment and point of discharge would require additional site-specific analyses (i.e., site

specific studies to select the exact outfall route, the discharge point and required mitigation);

- Any further consideration of Station 3F or any other potential Gulf outfall site would be subject to permit/administrative review and approval.

8) Water Conservation

The following conclusions can be stated about water conservation:

- Although evidence of drawdown from pumping is apparent, water appears to be in sufficient quantity to satisfy water supply needs. The costs of providing water, however, are higher than costs for water conservation;
- Legal disputes over water rights and inter-county water transfers could intensify. Such disputes have already arisen between Pinellas and Pasco Counties;
- Water conserving devices are easy to install and require little maintenance or operation;
- Losses in water revenue could result from decreased water use;
- Local plumbing codes may require revision; and
- Water conservation measures can generally reduce annual wastewater treatment and disposal costs by 10 percent in developed areas and 15 - 20 percent in less developed areas.

Local governments are encour ged to institute a water conservation program.

NORTH PINELLAS COUNTY, FLORIDA
DRAFT ENVIRONMENTAL IMPACT STATEMENT

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CHAPTER I

BACKGROUND AND PURPOSE OF THE EIS

PART A - BACKGROUND

The North Pinellas County Environmental Impact Statement (EIS) Study Area, shown in Figure i, has experienced tremendous population growth since the 1950's. Climate and the Gulf coast beaches attract vacationers, seasonal residents, and permanent, year-round residents. Development began south of the Study Area in St. Petersburg and Largo. As those areas became saturated with homes, development began to increase in Clearwater, Dunedin and areas further north. Pinellas County experienced a population growth of 39 percent from 1960 to 1970; it is now one of the most densely populated counties within the state of Florida.

Areas most pleasant for residential and commercial development are often environmentally fragile areas. As a result of being surrounded on three sides by marine or estuarine waters, Pinellas County's fresh groundwater supply is limited. All of the groundwater beneath the southern half of the county is now not potable due to salinity intrusion resulting from excessive pumping. Dispersed wellfields are still utilized in the northern half of the county, but most of these wells have limited yields. Little open space remains for any future development.

Degradation of surface water resources is a second example of the area's environmental sensitivity. Abilities of local coastal waters to assimilate wastewater are limited due to shallow depths, slow flushing rates and pollution from stormwater runoff. Therefore, other ways to dispose of wastewater have been investigated while still desiring to preserve the safe use of local beaches.

Centralized wastewater transmission and treatment systems are managed within the Cities of Clearwater, Dunedin, Oldsmar and Tarpon Springs by the Cities themselves. The City of Clearwater manages three wastewater treatment plants: Clearwater East, adjacent to Old Tampa Bay just off the Courtney Campbell Causeway; Clearwater Northeast which also is proposed to serve the City of Safety Harbor; and Clearwater Marshall Street which serves the western half of the City of Clearwater. These wastewater service areas are outlined in Figure ii.

The Pinellas County government manages the North Pinellas Wastewater treatment plant and all wastewater transmission lines in unincorporated areas north of the Cities of Dunedin and Clearwater. The area east of Lake Tarpon is not connected to any of the municipal wastewater treatment plants. On-lot systems throughout the Study Area are managed by the Pinellas County Health Department.

The Federal government provided funds for northern Pinellas County for wastewater facilities plans (also called 201 Plans) beginning in the mid-1970's. The North Pinellas County 201 Plan considered areas within the county north of the City of Clearwater: Dunedin, Oldsmar, Tarpon Springs, and unincorporated areas. The Central Pinellas 201 Plan considered the Cities of Clearwater and Safety Harbor and areas further south.

The North Pinellas 201 Plan resulted in a proposed solution to wastewater disposal problems which included the following:

- An outfall to the Gulf of Mexico to dispose of Dunedin's wastewater;
- Spray irrigation to dispose of wastewater from the North Pinellas wastewater treatment plant (WWTP)(serving unincorporated areas west of Lake Tarpon);
- Spray irrigation to dispose of Oldsmar's and Tarpon Spring's wastewater; and
- Conveyance of wastewater from the unincorporated areas east of Lake Tarpon to the Clearwater Northeast WWTP.

Backup (wet-weather) disposal methods for spray irrigation recommended in the North Pinellas 201 Plan were (1) a Gulf outfall for the unincorporated area west of Lake Tarpon and the City of Tarpon Springs and (2) deep-well injection at the Clearwater East WWTP for wastewaters generated in Oldsmar and in the area east of Lake Tarpon. Treatment levels at these wastewater treatment plants were recommended to be secondary or modified secondary.

Wastewater disposal methods recommended for the City of Clearwater in the Central Pinellas 201 Plan included:

- Deep-well injection of effluent from the Clearwater Marshall Street WWTP at a local site;
- Deep-well injection of effluent from the Clearwater East and Clearwater Northeast service areas at the Clearwater East WWTP; and
- Routing of untreated wastewater flows from the City of Safety Harbor to the Clearwater Northeast WWTP. The Safety Harbor WWTP was recommended to be abandoned.

Irrigation of publicly-owned lands was recommended in the Central Pinellas 201 Plan as a secondary disposal method. If deep-well injection was to be abandoned, the recommended municipal wastewater disposal system would be a Gulf outfall in conjunction with facilities recommended in the North Pinellas County 201 Plan.

After the 201 Plans were formulated, the U.S. EPA made two important judgements:

- A Finding of No Significant Impact could not be issued for the Gulf outfall alternative recommended in the 201 Plans; and

- Questions needed to be addressed regarding wastewater management in less developed portions of the Study Area, particularly the area east of Lake Tarpon, which includes significant floodplain and wetland areas and two large public wellfields.

The 201 recommendations have been complicated by other events as well. Preliminary deep-well injection field tests conducted during the late 1970s at the Clearwater East WWTP site led to the judgment that continuous injection at that site could not be carried out as recommended in the Central Pinellas 201 Plan without endangering nearby water supply wells. A suitable confining layer(s) was not located during those preliminary drilling activities. Recently, however, the City of Clearwater attempted to acquire funding to reactivate the Clearwater East test site because deep well injection regulation changes may allow for injection at the East site. Attempts to acquire EPA funding have, thus far, not been successful. Deep-well injection testing at the McKay Creek WWTP (located south of the study area) is still continuing.

Secondly, the Florida Department of Environmental Regulation (Florida DER) has not issued final wasteload allocations for Old Tampa Bay, Clearwater Harbor, or St. Joseph Sound. The Florida DER has issued a draft Tampa Bay Water Quality Impact Study which addresses wasteload allocations for Old Tampa Bay as well as for other Tampa Bay waters. This document is currently under review. Wasteload allocations for Clearwater Harbor and St. Joseph Sound are currently being developed by Florida DER.

An additional factor of concern is that Pinellas County waters have been designated as Outstanding Florida Waters (OFWs) and are afforded additional state protection from the discharge of treated wastewater. The OFW designation and protection is, however, not formally recognized by EPA funding decisions. These waters are also classified as Class II waters (Shellfish Propagation and Harvesting) and as such, the discharge of effluent is not allowed. DER had also established a "no discharge" wasteload allocation for many of these waters in 1978. Because of this allocation, EPA is now denying the reissuance of NPDES permits for facilities with this "no-discharge" allocation. Although DER is currently conducting wasteload allocation studies for many of these waters; the current "no-discharge" allocation, the OFW designation and Class II waters classification provide justification for permit denial.

PART B - PURPOSE OF THE EIS

The North Pinellas County EIS originated in 1979 due primarily to environmental concerns with a Gulf outfall and with wastewater management decisions proposed for the low-lying areas east of Lake Tarpon. No wastewater outfalls extend to the Gulf of Mexico from the Florida coast at the present time. Costs, environmental impacts, operability considerations and implementability factors needed to be addressed. Very little information about the nearshore Gulf Coast environment was available upon which to act on the 201 plan proposals; field data for the Gulf and for Clearwater Harbor - St. Joseph Sound have been collected as part of this EIS process.

Based upon the concerns raised in the 201 Plans and through the review and scoping processes, the following issues were identified as the major elements of the EIS:

- Development and evaluation of wastewater disposal alternatives for the numerous municipal wastewater treatment facilities;

- Development and evaluation of wastewater management alternatives for the developing area east of Lake Tarpon;

- Evaluation of the environmental effects and costs associated with the disposal of wastewater through a Gulf outfall; and

- Evaluation of water conservation and wastewater reuse in light of existing groundwater supply limitations in the Study Area.

CHAPTER II

THE SELECTED ALTERNATIVE

One specific, preferred alternative, or group of alternatives, can not yet be selected as eligible for Federal funding. Instead, results of this EIS are presented: (1) in terms of groups of alternatives which may become eligible for Federal funding including the environmentally preferred alternative and (2) in terms of overall results of the alternatives evaluation effort: cost analyses, in-depth consideration and (where possible) quantification of projected environmental impacts, evaluation of operational considerations for the various technologies, and evaluation of procedures for implementing the alternatives.

PART A - BASIS OF DECISION

Wasteload allocations for Old Tampa Bay, Clearwater Harbor - St. Joseph Sound have not yet been established. These wasteload allocations will prescribe required levels of treatment for wastewater discharges to these coastal waters. The allocations will be established by the Florida DER with EPA-Region IV approval. EPA will not recommend wastewater management alternatives at this time which may later not be in accord with these future wasteload allocations. Recommendations for service areas in which wasteload allocations are not involved are offered. All aspects of wastewater management: costs, environmental impacts, operation and implementation should be evaluated within the wasteload allocation process.

PART B - EIS RECOMMENDATIONS

These recommendations are related to three major EIS issues:

- Disposal options for sewered areas of North Pinellas County;
- Management options for the area east of Lake Tarpon; and
- Statements concerning a Gulf outfall of treated wastewater.

Certain aspects of the recommended alternatives cannot be given until approved wasteload allocations (including effluent limits and discharge locations) are available from Florida DER.

1) Disposal Options for Sewered Areas of North Pinellas County.

The EIS narrows the field of reasonable alternatives by outlining general costs, environmental impacts, operability concerns and implementability limitations associated with the EIS-generated alternatives. Least costly disposal options are identified and an environmentally preferred approach is recommended.

The EIS does not identify a selected alternative for wastewater disposal for the currently sewered portions of North Pinellas County because of a lack of approved wasteload allocations for Pinellas County's surface waters.

It is the recommendation of the EIS that non-potable wastewater reuse at parks, golf courses and other lands (and water conservation) be identified as the environmentally preferred alternative. The need for a wet weather backup for wastewater that cannot be reused is likely to exist. Potentially feasible backup options include continued but intermittent surface water discharges or deep well injection.

Reuse is the only management option that responds to the area's surface water quality problems while addressing groundwater supply limitations. The costs, advantages, and disadvantages of wastewater reuse, which are summarized below, are discussed in more detail in the Draft EIS. Cost comparisons between reuse and non-reuse options and the costs of the least costly disposal options are also presented in the Draft EIS.

The advantages in wastewater reuse include: 1) potentially high public acceptance, 2) reduced reliance on surface water discharges (and resultant water quality improvements) and 3) reduced strain on limited public groundwater supplies. The disadvantages lay in: 1) high cost, 2) the need for wet-weather back-ups (surface water discharge back-ups are constrained by lack of approved wasteload allocations), 3) operability considerations which include soils variations and the need for reliable maintenance at numerous dispersed sites, and 4) amount of wastewater reused is dependent upon private decisions and commitments. In general terms, the cost of wastewater reuse represents an additional $41 to $48 million beyond the costs associated with surface water disposal options at AWT and secondary treatment levels, respectively. These costs include reuse at all study area facilities (i.e., Oldsmar; Clearwater Northeast, East and Marshall Street; Dunedin; North Pinellas and Tarpon Springs).

It should be noted that this recommendation is to identify the environmentally preferred alternative, not the "EPA fundable" alternative. The "EPA fundable" alternative will be selected upon completion of the wasteload allocation process. Additionally, identification of the environmentally preferred alternative does not preclude the consideration of other disposal options (e.g. deep well injection or intermittent surface water discharges). Deep well injection is a disposal option that had been considered as both a primary and backup disposal option. Local agencies may wish to pursue further deep well investigations to determine its feasibility as a disposal option and its relationship to a reuse alternative.

Florida DER has indicated and the EPA has concurred that a wasteload allocation specifying advanced secondary treatment (AST) is appropriate for the Tarpon Springs discharge to the Anclote River given current water quality considerations. The effluent concentration must not exceed the following average concentrations: 6 milligrams per liter (mg/l) of five-day BOD, 6 mg/l of suspended solids, 6 mg/l of total nitrogen and 3 mg/l of total phosphorus.

Based on this effort, continued discharge to the Anclote River has already been pursued by Tarpon Springs. Decisions in the North Pinellas service area can be made independently of wasteload allocations. Land application of treated wastewater on-site and at the Innisbrook Country Club is the most cost-effective, environmentally sound disposal option for this area.

2) Wastewater Management for the Area East of Lake Tarpon

Existing wastewater management methods east of Lake Tarpon involve individual septic tanks with absorption field systems and private package plants that serve planned community developments with land application of effluent within that development. With proper maintenance and sufficient acreage, this practice has, apparently, been successful. Water quality or public health problems associated with these existing systems have not been documented. The County, however, has expressed a desire for wet weather back-ups (e.g., surface water discharges) for these land application systems. The thrust of facilities planning in this area is toward the provision of facilities for future population growth.

The area east of Lake Tarpon contains many sensitive environmental features that could be potentially impacted by increased development. The area is drained by Brooker Creek, a major drainage basin of Lake Tarpon. This tributary system is composed of a network of wetlands and floodplains that comprise approximately 33 percent of the area east of Lake Tarpon. Much of the area is also a groundwater recharge zone which is critical to the long term viability of the area's groundwater supply. One of the area's major public water supply well fields is located in this portion of the Study Area. EPA's participation in funding facilities that would support development could adversely affect these sensitive environmental features.

It is the recommendation of the EIS that EPA not provide funding assistance for wastewater facilities in the area east of Lake Tarpon. The reasonable alternatives have been evaluated in terms of cost, impact, reliability and implementability. No water quality or public health needs have been identified necessitating any major actions, and the provision of additional facilities would promote growth in environmentally sensitive areas. County and private developers should provide facilities if desired to support future growth.

EPA's Construction Grants Regulations allow the Agency to fund facilities only to serve capacity for flows existing on the date of Step 3 grant award, but not to exceed 1990 flows. Since the basis for many of the alternatives for the area east of Lake Tarpon is to serve future development, the Agency's funding role in this area should be limited.

Since the EIS recommendation in this area does not involve a surface water discharge, the wasteload allocation process is not a factor.

Scientific and engineering support for proper management of on-lot and other small wastewater systems east of Lake Tarpon is available from numerous sources. The EPA's experience with guiding the management of small wastewater systems throughout the United States may be helpful to local wastewater managers, and such experience is available upon request. Some suggestions for providing the most effective management of small wastewater systems are the following:

- Interactions between the local health agency and homeowners are quite important. A Homeowners Guide may be worth the effort needed to prepare.

- Engineers should be qualified and installers should be licensed to work with all types of on-lot systems to be utilized.

- Installers could be required to submit quarterly activity reports (e.g. maintenance and septage hauling activities - amounts and locations).

3) Environmental Statements Concerning a Gulf Outfall for Treated Wastewater

A Marine Sampling Program was conducted as part of the EIS to collect data to develop a Gulf outfall alternative for wastewater disposal to consider along with other disposal alternatives. The Marine Sampling Program was also designed to generically demonstrate the evaluation methodology that should be used in considering a Gulf outfall. Physical, biological and chemical data have been obtained in the EIS Marine Sampling Program. The Study Area for the sampling program included 20 miles of the coast, from the Belleair Beach Causeway north to the Anclote River, and extended 10 miles offshore of the barrier islands.

Of the numerous environmental factors to be considered, three were chosen as being the most important in the consideration of a Gulf outfall in this area: potential health and aesthetic impacts at bathing beaches, ecological impact to natural reef hardbottom-limestone outcrops, and impairment of the beneficial uses of the manmade fishing reefs.

The following statements concerning a Gulf outfall from northern Pinellas County can be made based on the Marine Sampling Program and EIS evaluations:

- It would provide the area with a reliable long-term wastewater disposal option;
- It would require a major investment of capital in a disposal option that would tend to discourage the environmentally preferred alternative of wastewater reuse;
- It would involve the environmental tradeoffs of minimizing impact to estuarine waters while increasing impacts to the Gulf (i.e., bottom disruption and community alteration, attractant to fish and other organizms causing impacts, nutrient impact);

- It would remove a development constraint that would potentially promote higher density development and development in environmentally sensitive areas which are not suitable for on-lot or recycle wastewater management;

- Secondary treatment and disinfection of wastewater would be necessary to minimize adverse impacts of an outfall on local beaches;

- Station 3F was selected for detailed study to demonstrate the generic methodology for evaluating the Gulf outfall alternative. The area of Station 3F which is roughly four miles offshore from Honeymoon Island, was found to be less environmentally sensitive than other sites located closer to shore that were evaluated during the Marine Sampling Program;

- Station 3F appears to be more cost effective than other stations evaluated during the Marine Sampling Program based on estimated cost and combined impacts to public health, the St. Joseph Sound estuary and natural hardbottom reef habitat;

- Nearshore Gulf currents vary such that predictions of effluent movement from a discharge are uncertain. Dye discharged in the area of Station 3F during the Marine Sampling Program generally moved in a south-southwesterly direction. A discharge plume in the area of Station 3F would be expected to have minimal impact on the area's beaches;

- Any further consideration of discharge sites near Station 3F should focus on areas slightly north of the exact study location to further minimize potential impacts to usage of the Dunedin Artificial Reef;

- The precise outfall alignment and point of discharge would require additional site-specific analyses (i.e., site specific studies to select the exact outfall route, the discharge point and required mitigation);

- Any further consideration of Station 3F or any other potential Gulf outfall site would be subject to permit/ administrative review and approval.

PART C - REMAINING ALTERNATIVES

Wasteload allocations for Old Tampa Bay and Clearwater Harbor-St. Joseph Sound are in the process of being developed. The selected treatment level for each body of water could be as minimal as secondary wastewater treatment or as stringent as not allowing any wastewater discharge.

Therefore, all of the screened alternatives listed in Table 1 and evaluated in the EIS for the Clearwater East, Clearwater Northeast, Clearwater Marshall Street, Dunedin and Oldsmar service areas remain under consideration. Costs, impacts on the environment, operability and implementability of all remaining alternatives are presented in the Draft EIS.

Two additional points need to be emphasized. The first is that no wastewater alternatives for Clearwater, Oldsmar and Dunedin can be determined to be eligible for funding under the Construction Grants program until the wasteload allocations have been finalized through Florida DER. The second point is that any statements about a Gulf outfall extending from the North Pinellas County Study Area pertain only to this EIS. Statements made about potential impacts of a Gulf outfall may not be applicable to other locations along the Gulf coast.

TABLE 1
WASTEWATER DISPOSAL ALTERNATIVES

Designation	Alternative
Individual Alternatives	
City of Clearwater East (E) Service Area	
E-1(1)	Continue existing discharge to Old Tampa Bay south of the Courtney Campbell Causeway
E-2(1)	Discharge to Old Tampa Bay at different location south of Causeway
E-3	Discharge to Old Tampa Bay north of Causeway
E-17(1)	Distribution of reusable wastewater to parks, golf courses and other lands for nonpotable uses
City of Clearwater Marshall Street (MS) Service Area	
MS-1(1)	Continue existing discharge to Stevenson Creek
MS-2	Discharge to Clearwater Harbor
MS-3	Discharge via outfall to Gulf of Mexico extending from Clearwater Beach Island
MS-17(1)	Distribution of reusable wastewater to parks, golf courses and other lands for nonpotable uses
City of Clearwater Northeast (NE) Service Area	
NE-1(1)	Resume former discharge which flows into Possum Branch (and subsequently to Old Tampa Bay)
NE-2	Discharge directly to Possum Branch
NE-3	Discharge to Safety Harbor
NE-4	Discharge to Old Tampa Bay north of Causeway
NE-16(1)	Discharge of reusable wastewater to parks, golf courses and other lands for nonpotable uses.
City of Dunedin (D) Service Area	
D-1(1)	Continue existing discharge to St. Joseph Sound
D-2	Relocate discharge to some other location in St. Joseph Sound

TABLE 1
(Cont'd.)

Designation	Alternative
City of Dunedin (D) Service Area (cont'd.)	
D-3	Discharge via outfall to Gulf of Mexico extending from Honeymoon Island
D-15(1)	Distribution of reusable wastewater to parks, golf courses and other lands for nonpotable uses.
North Pinellas (NP) Service Area	
NP-1	Discharge to St. Joseph Sound
NP-2	Discharge via outfall to Gulf of Mexico extending from Gulf coast north of Honeymoon Island
NP-4(1)	Discharge to Anclote River
NP-15(1)	Apply wastewater to sites within the county including sites now receiving effluent (land application)
NP-19(1)	Distribution of reusable wastewater to parks, golf courses and other lands for nonpotable uses
City of Oldsmar (O) Service Area	
O-1(1)	Discharge to Safety Harbor
O-2	Discharge to Mobbly Bay
O-3	Discharge the Old Tampa Bay north of Courtney Campbell Causeway
O-5	Combine with Higgins Power Plant cooling water and effluent prior to discharge to Old Tampa Bay
O-18(1)	Distribution of reusable wastewater to parks, golf courses and other lands for nonpotable uses
City of Tarpon Springs (TS) Service Area	
TS-1(1)	Continue existing discharge to Anclote River
TS-2	Discharge via outfall to Gulf of Mexico extending from Gulf coast north of Honeymoon Island
TS-4	Discharge to St. Joseph Sound
TS-5(1)	Discharge to different location within Anclote River

TABLE 1
(Cont'd.)

Designation	Alternative
City of Tarpon Springs (TS) Service Area (cont'd.)	
TS-6	Combine with Anclote Power Plant cooling water and effluent prior to discharge to Gulf of Mexico
TS-14(1)	Apply wastewater to sites within the county (land application)
TS-19(1)	Distribution of reusable wastewater to parks, golf courses and other lands for nonpotable uses
Area East of Lake Tarpon	
	Various systems for individual establishments
	Sub-division systems with land application at golf courses
	Interceptor connecting to the Oldsmar wastewater treatment plant
	Interceptor connecting to the Tarpon Springs treatment plant
Sub-Regional Alternatives	
Sub-Reg. 1(1)	Discharge to Old Tampa Bay south of Courtney Campbell Causeway from the Clearwater East, Clearwater Northeast and Oldsmar WWTPs (wastewater treatment plants)
Sub-Reg. 2	Discharge to Old Tampa Bay north of the Courtney Campbell Causeway from the Clearwater East, Clearwater Northeast and Oldsmar WWTPs
Sub-Reg. 3	Discharge to Clearwater Harbor south of the Memorial Causeway from the Clearwater Marshall Street and Dunedin WWTPs
Sub-Reg. 4	Discharge to Clearwater Harbor south of the Dunedin Causeway from the Clearwater Marshall Street and Dunedin WWTPs
Sub-Reg. 5	Discharge to St. Joseph Sound north of the Dunedin Causeway from the Clearwater Marshall Street and Dunedin WWTPs
Sub-Reg. 6	Discharge to St. Joseph Sound north of the Dunedin Causeway from the North Pinellas and Tarpon Springs WWTPs

TABLE 1
(Cont'd.)

Designation	Alternative
Sub-Reg. 7(1)	Discharge to Anclote River from the North Pinellas and Tarpon Springs WWTPs
Sub-Reg. 8	Discharge via outfall to Gulf of Mexico extending from Gulf coast north of Honeymoon Island. Discharges would be treated at the North Pinellas and Tarpon Springs WWTPs
Sub-Reg. 9(1)	Discharge via outfall to Gulf of Mexico extending from Honeymoon Island. Discharges would be treated at the Clearwater Marshall Street and Dunedin WWTPs
Sub-Reg. 10(1)	Same as Sub-Reg. 9 except discharges to be disposed would be treated at the Clearwater Marshall Street, Dunedin, North Pinellas and Tarpon Springs WWTPs
Sub-Reg. 11(1)	Same as Sub-Reg. 9 except that the outfall would extend from Clearwater Beach Island
Sub-Reg. 12(1)	Deep-well injection at or south of the Clearwater Marshall Street WWTP. Discharges would be treated at the Clearwater Marshall Street and Dunedin WWTPs.
Sub-Reg. 13(1)	Same as Sub-Reg. 12 (deep-well injection) except wastewaters from the Clearwater East and Clearwater Northeast WWTPs would be disposed.
Regional Alternatives	
Reg. 1	Discharge to Old Tampa Bay, south of Courtney Campbell Causeway
Reg. 2	Discharge to St. Joseph Sound south of Dunedin Causeway
Reg. 3	Discharge to St. Joseph Sound north of Dunedin Causeway at southern end of Tarpon Springs
Reg. 4(1)	Gulf outfall extending from Honeymoon Island
Reg. 5(1)	Gulf outfall extending from Clearwater Beach Island
Reg. 6(1)	Deep-well injection at or south of the Clearwater Marshall Street WWTP

(1) Alternatives that are evaluated in detail.

CHAPTER III

ERRATA AND REVISIONS TO THE DRAFT EIS

Page	Paragraph	Lines	Corrections
vi			A revised Table ii is provided in the Executive Summary of this document.
ix			A revised Figure ii is provided in the Executive Summary of this document.
1			Figure 1 should follow page 35.
1	1	2	"Shown in Figure i, has"
10	2	6	"The City of Safety Harbor is currently served by the"
15	4	3	"McKay Creek WWTP in the unincorporated area of Pinellas County".
15	5	2-3	"are approved but due to either possible well construction problems or inadequate confinement, effluent is leaking to the overlying aquifer."
15	5	3-4	"wells at the McKay Creek and South Cross Bayou are inoperative at this time and testing is scheduled to determine if these facilities are leaking, and St. Petersburg Northwest WWTP is being"
16	1	1	"wells at the Albert Whitted WWTP will be utilized; two 30-inch diameters injection wells are proposed."
34			Add the following footnote to Table 5: "(3) These are 4th quarter 1980 costs."

CHAPTER IV

PUBLIC COMMENTS AND EPA COMMENTS

PART A - ORAL COMMENTS

Oral comments on the Draft EIS were received at a public hearing held on June 11, 1985, at the Assembly Room of the Pinellas County Courthouse. This Chapter contains the transcript of the hearing, including introductory statements made by representatives of EPA. Public comments and EPA's responses start on page 38.

Table 2 is an index to the oral comments, and Table 3 summarizes the general subjects mentioned by each commentor.

PART B - WRITTEN COMMENTS

The hearing record remained open through June 25, 1985. Letters were received after that date, but all comments have been included here. Table 4 is an index to the written comments, and Table 5 summarizes the general subjects mentioned by each commentor. The comment letters and EPA's responses follow Tables 4 and 5.

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TABLE 2

INDEX TO PUBLIC HEARING
COMMENTS ON NORTH PINELLAS COUNTY DRAFT EIS

Comment Code	Page(s)	Commentor	Nature of Comment
CCAW-1	38	Committee for Clean Air and Water	Capacity of Tarpon Springs Plant
CCAW-2	39	Committee for Clean Air and Water	System failure
CCAW-3	39	Committee for Clean Air and Water	Impacts of Gulf outfall
CCAW-4	39	Committee for Clean Air and Water	Tourism impacts
CCAW-5	39	Committee for Clean Air and Water	Support reuse
JP-1	40	Anchorage Homeowners Association	Population projections
JP-2	41	Anchorage Homeowners Association	Future study area problems
JP-3	41	Anchorage Homeowners Association	Cutoff for Federal Funds
JP-4	42	Anchorage Homeowners Association	Adequacy of wastewater treatment
JP-5	42	Anchorage Homeowners Association	Adequacy of treatment during wet weather
JP-6	44	Anchorage Homeowners Association	Plant consolidation
JP-7	44	Anchorage Homeowners Association	Legislate against development
JP-8	45	Anchorage Homeowners Association	Adequacy of wastewater treatment
JP-9	46	Anchorage Homeowners Association	Environmental feasibility of Gulf outfall
JP-10	46	Anchorage Homeowners Association	Intermittent wet weather discharge
JP-11	47	Anchorage Homeowners Association	Environmental feasibility of a Gulf outfall
JP-12	49	Anchorage Homeowners Association	Federal grant assistance availability
JP-13	50	Anchorage Homeowners Association	Lake Tarpon water quality
RK-1	51	Dr. Robert Kuester	Lack of publicity
RK-2	52	Dr. Robert Kuester	Support for EIS findings
RK-3	52	Dr. Robert Kuester	Oppose Gulf outfall
RK-4	53	Dr. Robert Kuester	Basis of costs
RK-5	54	Dr. Robert Kuester	Limitations of Gulf outfall data

TABLE 2 (Cont'd.)

INDEX TO PUBLIC HEARING
COMMENTS ON NORTH PINELLAS COUNTY DRAFT EIS

Comment Code	Page(s)	Commentor	Nature of Comment
RK-6	54	Dr. Robert Kuester	Support reuse
RK-7	55	Dr. Robert Kuester	Oppose Gulf outfall backup for reuse
RK-8	55	Dr. Robert Kuester	Development impacts of a Gulf outfall
RK-9	55	Dr. Robert Kuester	EPA development of new water supplies
RK-10	56	Dr. Robert Kuester	Current discharge of wastewater into Gulf
RK-11	56	Dr. Robert Kuester	Groundwater recharge with effluent
CO-1	59	City of Oldsmar	Support reuse
CO-2	60	City of Oldsmar	Wasteload allocation process
CO-3	61	City of Oldsmar	Conclusions of final wasteload allocation
CO-4	61	City of Oldsmar	Support land application and reuse
CO-5	62	City of Oldsmar	Support recycling of wastewater
CO-6	63	City of Oldsmar	Delay Final EIS
CO-7	65	City of Oldsmar	Solve future problems before they happen
CO-8	66	City of Oldsmar	Support recycling of wastewater
CO-9	66	City of Oldsmar	Outdated costs
CO-10	67	City of Oldsmar	Determination of new discharge
CO-11	68	City of Oldsmar	Determination of new discharge
CO-12	69	City of Oldsmar	Intermittent wet weather discharge
CO-13	69	City of Oldsmar	EIS study area
CO-14	69	City of Oldsmar	Funding of reuse
CO-15	70	City of Oldsmar	Outdated costs
CO-16	70	City of Oldsmar	Delay Final EIS

TABLE 2 (Cont'd.)

INDEX TO PUBLIC HEARING
COMMENTS ON NORTH PINELLAS COUNTY DRAFT EIS

Comment Code	Page(s)	Commentor	Nature of Comment
PCSS-1	76	Pinellas County Sewer System	Accomplishment of EIS purposes
PCSS-2	71	Pinellas County Sewer System	Wastewater alternatives for area east of Lake Tarpon
PCSS-3	71	Pinellas County Sewer System	Support reuse
PCSS-4	72	Pinellas County Sewer System	Other disposal alternatives
PCSS-5	72	Pinellas County Sewer System	Intermittent wet weather discharge
PCSS-6	72	Pinellas County Sewer System	Accomplishment of EIS purpose
AB-1	74	Mr. Alfred Boyd	EIS Study Area
AB-2	75	Mr. Alfred Boyd	Septic tank effluent discharge
AB-3	75	Mr. Alfred Boyd	Water supply contamination

TABLE 3
SUMMARY OF GENERAL TOPICS COVERED BY ORAL COMMENTS

TOPICS COVERED	SOURCE OF COMMENTS					
	COMMITTEE FOR CLEAN AIR AND WATER	ANCHORAGE HOMEOWNERS ASSOCIATION	DR. ROBERT KUESTER	CITY OF OLDSMAR	PINELLAS COUNTY SEWER SYSTEM	MR. ALFRED BOYD
TREATMENT PLANT	1. 2					
GULF OUTFALL IMPACTS	3	9. 11	5. 8			
ECONOMIC IMPACTS	4					
REFUSE	5		6	1. 4. 14	3	
POPULATION PROJECTIONS		1				
WASTEWATER DISCHARGE		2. 4. 8	10	7. 10. 11		2
ALTERNATIVE FUNDING		3. 12				
INTERMITTENT WET WEATHER DISCHARGE		5. 10		12	5	
ALTERNATIVES CONSIDERED		6			2. 4	
DEVELOPMENT IMPACTS		7				
LAKE TARPON IMPACTS		13				
PUBLIC PARTICIPATION			1			
PUBLIC ACCEPTANCE			2			
COSTS			4			
GULF OUTFALL			3. 7			
WATER SUPPLY			9			3
DEEP WELL INJECTION			11			
WASTELOAD ALLOCATION PROCESS				2. 3		
LAND APPLICATION				4		
RECYCLING WASTEWATER				5. 8		
E.I.S. COMPLETION				6. 16		
OUTDATED COSTS				9. 15		
E.I.S. STUDY AREA				13		1
E.I.S. PURPOSES					1. 6	

UNITED STATES OF AMERICA
ENVIRONMENTAL PROTECTION AGENCY
REGION IV

- x

In the Matter of:

DRAFT EIS PUBLIC HEARING

NORTH PINELLAS COUNTY, FLORIDA
ENVIRONMENTAL IMPACT STATEMENT
for
PROPOSED WASTEWATER FACILITIES

- x

Time: 7:30 p.m.

Date: June 11, 1985

Location: Pinellas County Courthouse
Fifth Floor Assembly Room
Clearwater, Florida

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APPEARANCES:

THE PANEL:

ROBERT HOWARD, Hearing Officer
Chief, NEPA Compliance Section
EPA, Region IV
Atlanta, Georgia

DOUG BRAMLETT
Environmental Specialist
Florida Department of Environmental Regulation
Tampa, Florida

RON MIKULAK
EPA Project Officer, EIS
EPA, Region IV
Atlanta, Georgia

-oOo-

SPEAKERS:

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DON MC CULLERS	page 50
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PROCEEDINGS

(Whereupon, at 7:36 p.m. the public hearing was called to order)

HEARING OFFICER:

Good evening. I'd like to welcome everybody to the public hearing on the Draft Environmental Impact Statement for Proposed Wastewater Facilities in the north Pinellas County, Florida area.

My name is Robert Howard. I am Chief of the NEPA Compliance Section for the Environmental Protection Agency, Region IV, located in Atlanta, Georgia.

With me this evening on the hearing panel, on my left is Doug Bramlett, an environmental specialist from the Tampa District Office of the Florida DER; and on my right, Mr. Ron Mikulak, the EPA Project Officer for this Environmental Impact Statement.

I don't have any elected officials who indicated on their cards that they were elected officials, but if there are any, I would like to recognize them at this time.

Are there any elected officials?

(No response)

Okay. The purpose of this evening's hearing is to receive public and other agencies' comments on the north Pinellas County Draft Environmental Impact Statement. This EIS is being prepared on wastewater facilities proposed in the 201 facility plans prepared for the north and central Pinellas County areas.

The preparation of this EIS is authorized by the Clean Water Act and the National Environmental Policy Act. The Clean Water Act enables EPA to fund up to 75% of the eligible costs for the planning, design, and construction of wastewater facilities. Effective October 1st, 1984, this amount was reduced to 55%.

The planning phase of this process results in the preparation of a plan for wastewater facilities for a 20-year designing period.

Pinellas County has been designated as the local agency responsible for facility planning in this area.

The National Environmental Policy Act requires federal agencies to prepare an Environmental Impact Statement on major federal actions significantly affecting the quality of the human environment.

Because of the environmental complexities and water quality issues involved in this particular area and wastewater facilities for this area, EPA made the decision to prepare an Environmental Impact Statement on the 201 facilities plan.

This public hearing is being held to receive comments on the Draft EIS pursuant to the guidelines of the President's Council on Environmental Quality and EPA rules and regulations regarding preparation of EIS's.

The Draft EIS is being discussed in a forum to encourage public participation in the federal decision-making process and to develop and improve public understanding of federally-funded projects.

The Draft EIS was made available to the public and was listed in the Federal Register on April 26th, 1985. The Draft EIS comment period will extend until June 25th, 1985. The comments received this evening and during the comment period will become part of the record. EPA will respond to the comments received this evening and in writing in the final EIS.

Before we receive your comments this evening, I'd like to ask Mr. Mikulak to give a brief summary of the EIS and some of the conclusions and recommendations that are contained therein.

Ron?

MR. MIKULAK:

Thank you, Bob.

Good evening. As Bob mentioned, my name is Ron Mikulak, the Project Officer for the north Pinellas EIS.

What I'd like to do this evening, before we receive your comments, is to provide you with a little bit of background of the EIS, what we have done, the conclusions and recommendations that we've come out with thus far in order to set the stage and put things in perspective for your comments.

What I'll be doing is following very closely to the handout that you should've picked up when you came in this evening. The first page of the handout is just an agenda item, which summarizes what we'll be going over this evening. The next four pages of the handout, we put together a brief summary. It's basically a brief outline of what I'll be going over this evening so you can follow along some of the details that I won't be mentioning specifically, but you can follow along with the details.

I've also included two tables, one which outlines the status for existing wastewater facilities in the study area. The second table is a summary of implementability, operability, and environmental impact factors of some of the alternatives; and finally, there are three maps that I'll be referring to.

So if you just bear with me in the rustling of the papers back and forth, I'll start off with a short discussion of what the purpose of the north Pinellas EIS was.

As we indicate, we put down three basic objectives that we tried to address through the preparation of this EIS, the first being the identification and evaluation of wastewater disposal alternatives for the existing treatment facilities in northern Pinellas County; secondly, to identify and evaluate wastewater management alternatives for the area east of Lake Tarpon that is not now currently served by the

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existing municipal facilities; and thirdly, to evaluate the impacts and costs associated with disposal of wastewater via Gulf outfall extending from northern Pinellas County.

Again, to put things in a little bit better perspective, I'll take a few moments and go into some of the background of this EIS and facilities planning in this area, and I'll be brief with my comments.

As Bob indicated in his comments concerning the Clean Water Act, the Clean Water Act was first passed in 1972, and it was further amended in 1977 and 1981 with the basic intent to improve the quality of the nation's waters.

One of the primary mechanisms that's been employed in the Clean Water Act is Section 201. Section 201 authorized EPA, as Bob mentioned, to fund wastewater facilities through the grants, the construction grants program.

It started out in the 75% funding level for planning, design, and construction, and has now recently been reduced to a 55% level.

To meet the mandate of the Clean Water Act, state water pollution control agencies designate local agencies to carry out the specific task of planning for wastewater management strategies.

These strategies are typically called 201 facilities plans, and again, as it was mentioned, in this area there were two plans in the study area, the EIS study area.

There were two plans that were prepared, both under the direction of Pinellas County, and they were the north Pinellas and central Pinellas County 201 plans.

The north Pinellas County plan was completed in May of '78, and the central Pinellas County plan was completed in April of 1979.

The 201 plan's recommendations generally proposed that all nearshore surface water discharges be replaced by several deep well injection and spray irrigation alternatives. Additionally, Gulf outfall was proposed as a primary disposal option for some discharges and as a back-up for others.

EPA's review of the 201 plans raisedsubstantive questions concerning the deep well injection and the Gulf outfall alternatives.

Additionally, the lack of approved wasteload allocations for nearshore wastewater discharges and the impact considering the environmentally sensitive area east of Lake Tarpon were additional concerns that were raised in EPA's review of the plans.

To address these concerns, EPA determined that it was necessary to prepare an environmental impact statement, and in May of 1979 the EIS Notice of Intent was issued, and the EIS was initiated.

The issues that were determined to be important and to be addressed in the EIS, as identified through a scoping

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process that we were involved with, included four major issues. They include wastewater disposal alternatives for northern Pinellas County, wastewater management alternatives for the area east of Lake Tarpon, the consideration of Gulf outfall, as well as the consideration of the reuse of treated wastewater.

To get a better fix or better handle on what the existing situation is like, I can refer you to Table i and Figure 1 of the handout in which we outline and summarize the status of existing wastewater facilities in the area.

Very briefly, we're dealing with eight municipal wastewater treatment plants with a 1984 capacity of roughly 33 million gallons per day.

In summary, the Clearwater East Sewage Treatment Plant discharges to Old Tampa Bay; the Clearwater Marshall Street Sewage Treatment Plant discharges to Stevenson Creek and then to Clearwater Harbor; the Clearwater Northeast Plant now discharges to the Clearwater East outfall; the Dunedin Mainland Plant discharges to St. Joseph Sound; the Oldsmar Sewage Treatment Plant discharges to evaporation-percolation ponds on site; Safety Harbor discharges to Mullet Creek and then to Old Tampa Bay; the Tarpon Springs facility discharges to Anclote River, and the area east of Lake Tarpon is served by on-lot systems or by package plants with a combination of holding ponds and then spray irrigation on golf courses and other open lands.

Toward the bottom of the page of the first page of the summary, a bulleted item under Alternatives, in developing alternatives for the study area six basic alternatives were considered, including continued discharge to nearshore coastal waters, the Gulf outfall, deep well injection, land application, wastewater reuse, and the no-federal action alternative.

In applying these alternatives to the study area, several subareas were delineated in conducting the EIS. For example, the Oldsmar, the Clearwater Northeast Plant, and the Clearwater East Plant were grouped together to form what we call the Old Tampa Bay Subarea, because they all discharge to the Old Tampa Bay drainage area.

The Dunedin and the Clearwater Marshall Street treatment plants were grouped together on the other side of the mainland in what we call the Clearwater Harbor, St. Joseph Sound Subarea.

The North Pinellas County Treatment Facility was its own North Pinellas County Subarea, as well as the Tarpon Springs facility was in the Tarpon Springs Subarea.

Next we were somewhat limited in how far we could take the alternatives in the evaluation process, since approved wasteload allocations from Florida DER were not available for most of Pinellas County surface waters, with the exception of wasteload allocation for Tarpon Springs, Anclote River.

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Therefore, a range of treatment levels from secondary to advanced treatment and a series of combinations from individual sewage treatment plants to sub-regional treatment plants, meaning two or more treatment facilities, and finally, regional alternatives which would involve all facilities combined were considered.

The alternatives were then screened on the basis of cost, impact, operability, implementability, to determine which of those should be carried on for further consideration, and because of those factors, many of the alternatives either for high cost or implementability concerns or environmental impact concerns were dropped from further consideration.

Costs for the least cost disposal options for each of the subareas and the overall cost of the range of alternatives were also determined. For example, on the handout on page 2 in the middle of the page, individual service area alternatives -- that is, each treatment facility maintaining its own service area uncombined with anyone else but with secondary treatment to continue discharges to near surface -- excuse me -- discharge to nearshore surface waters -- came out with a present worth cost in the neighborhood of 48 million dollars.

Next came maintaining the individual service area alternatives but increasing the level of treatment to advanced treatment continued with nearshore surface water discharge increased the cost to 86 million dollars.

A system of reuse in which reuse would be instituted at each of the treatment facilities but with treatment levels at secondary plus filtration resulted in a cost of 96 million dollars.

A regional Gulf outfall -- that is, combining all wastewater in the area and discharging it through a single Gulf outfall -- results in a cost of roughly 101 million dollars.

A regional deep well injection alternative sees an increase to a cost of 105 million dollars; and finally, a system of reuse but increasing the level of treatment to advanced treatment would see a cost of 121 million dollars.

In addition to cost, as I mentioned, we did look at implementability, operability, environmental impact factors for the disposal alternatives. Rather than go at this time into the details of the results of those evaluations, I refer you at your leisure to Table ii in the handout. You've probably reviewed the information from the EIS already, but for tonight I've summarized and concluded in that table.

In considering the factors of the alternatives' evaluation process and without approved wasteload allocations for most of Pinellas County surface waters, we came to the conclusion very quickly that a study area-wide alternative that can be considered the most cost-effective environmentally-sound wastewater management option for north Pinellas County cannot at this time be selected.

The EIS can, however, narrow the field -- I should say the EIS has rather than can -- has, however, narrowed the field of reasonable alternatives, presents costs and impacts associated with various effluent limitation combinations and identifies constraints or limitations of the alternatives.

On the third page of the handout, continuing with the conclusions of the EIS, we point out that decisions in Tarpon Springs for the area east of Lake Tarpon and the north Pinellas service area can be made and are not dependent on forthcoming wasteload allocations.

EPA funding participation in the area east of Lake Tarpon is limited by both regulation and policy. I'll expound on that in a few moments.

The environmental cost conclusions can be offered concerning the Gulf outfall extending from northern Pinellas County and, finally, an area-wide environmentally-preferred alternative can be and is identified in the EIS.

And what I'd like to do with the few minutes remaining and the few pages left in the handout is to go over what we consider to be the recommendations of the Draft EIS at this time and probably those recommendations that you'll be commenting on in just a few moments.

The first recommendation deals with wastewater reuse.

The wastewater reuse alternative for each service area is identified as the environmentally-preferred disposal alternative. Reuse is the only management option that responds to the area's surface water quality problems while addressing groundwater supply limitations.

The costs, the advantages, and the disadvantages should be clearly outlined to the community and local decision makers. The need for a wet-weather back-up for wastewater that cannot be reused is likely to exist. Potentially feasible back-up options include continued but intermittent surface water discharges or deep well injection. It should be noted that this recommendation is to identify the environmentally-preferred alternative and is not necessarily the fundable alternative, the EPA fundable alternative.

The fundable alternatives for both Clearwater Harbor and St. Joseph Sound and the Old Tampa Bay subareas will be selected upon completion of the wasteload allocation process. Additionally, identification of the environmentally-preferred alternative does not preclude the consideration of other disposal options.

Deep well injection is a disposal option that has been considered as both a primary and a back-up disposal option. Local agencies may wish to pursue further deep well injection investigations to determine its feasibility as a disposal option and its relationship to a reuse alternative. In this regard, potential reuse distribution sites and distribution lines are shown on Figure 2 of tonight's handout.

The second recommendation deals with the Tarpon Springs subarea. Discharge to the Anclote River of advanced secondary treated effluent is the recommended alternative for Tarpon Springs in accordance with the approved wasteload allocation, and in fact the project for Tarpon Springs has been broken out of the EIS and is proceeding.

Recommendation number three, the north Pinellas subarea. Land application of the existing site and at the Innisbrook Country Club has been shown to be the most cost-effective environmentally-sound option available. Regardless of wasteload allocations, land application is the recommended alternative for north Pinellas subarea.

Recommendations four and five combined deal with the Clearwater Harbor/St. Joseph Sound subarea and the Old Tampa Bay subarea. In the absence of wasteload allocation for these subareas, numerous alternatives remain viable for the Dunedin, Marshall Street, Oldsmar, the Clearwater Northeast and Clearwater East service areas.

The information from the EIS process is available to the state for their use in decisions, for their decisions. Upon completion of the wasteload allocation process, the most cost-effective, environmentally-sound option for funding eligibility can then be selected.

Recommendation number six deals with the area east of Lake Tarpon. EPA's policy and regulations concerning funding facilities in environmentally-sensitive areas and funding capacity for future flows do not allow funding assistance in the area east of Lake Tarpon.

The reasonable alternatives of on-lot systems, package plants, and land application or connection to the Oldsmar Sewage Treatment Plant have been evaluated in terms of cost, impact, reliability, and implementability. This information is available to the county and private developers for local decision making.

EPA encourages governing bodies within the study area to consider the function and value of environmentally-sensitive undeveloped areas east of Lake Tarpon, and that is groundwater recharge areas, wetlands, flood plains in future planning and development decisions.

EPA's construction grants regulations allow the agency to fund facilities only to serve capacity for flows existing on the date of a Step Three grant; that is, for construction but not to exceed the year 1990 flows.

Since the basis for many of the alternatives for the area east of Lake Tarpon is to serve future development, EPA will not participate in funding wastewater facilities in this area.

Recommendation number seven deals with the Gulf

outfall, and I refer you to Figure Number 3 in the handout.

As part of this EIS, a marine measurement and sampling program was conducted during 1980 to better define existing environmental and physiographic conditions in the nearshore Gulf of Mexico off northern Pinellas County.

The data collected during the sampling program were utilized to assist in evaluating the Gulf outfall wastewater disposal alternative and to generically demonstrate the methodology that should be used in considering the Gulf outfall.

The general findings related to the Gulf outfall from northern Pinellas County are as follows:

It would provide the area with a reliable, long-term wastewater disposal option. It would require a major investment of capital in a disposal option that would tend to discourage the environmentally-preferred alternative of wastewater reuse. It would involve the environmental tradeoffs of minimizing impacts to nearshore waters while increasing impacts to the Gulf. It would remove a development constraint that would potentially promote higher density development and development in environmentally-sensitive areas which are not suitable for on-lot or recycle wastewater management.

Secondary treatment and disinfection of wastewater would be necessary to minimize impacts of an outfall on local beaches.

Station 3F, which is shown on Figure 3, is roughly four miles offshore from Honeymoon Island and was selected for additional study to further demonstrate the methodology for evaluating the Gulf outfall.

The area of Station 3F was found to be less environmentally sensitive than other sites located closer to shore that were evaluated during the marine sampling program. Station 3F appears to be the most cost-effective, more cost-effective than other stations evaluated during the marine sampling program based on estimated costs and combined impacts to public health, the St. Joseph Sound estuary and natural hardbottom reef habitat.

Nearshore Gulf currents vary such that predictions of effluent movement from a discharge are uncertain. Dye discharged in the area of Station 3F during the marine sampling program generally moved in a south, southwesterly direction.

A discharge plume in the area of Station 3F would be expected to have minimal impact on area beaches. Any further consideration of discharge sites near Station 3F should focus on areas slightly north of the exact study location to further minimize potential impacts to usage of the Dunedin Artificial Reef.

A precise outfall alignment and point of discharge would require additional site-specific analyses; that is, site-specific studies to select the exact outfall route, the

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discharge point, and any required mitigation. Any further consideration of Station 3F or any other potential Gulf outfall site would be subject to permit administrative review and approval.

The final recommendation in the EIS deals with water conservation. Due to the potential reductions in water consumption and reductions in potential wastewater management costs, local governments are encouraged to pursue a water conservation program.

And finally, I'd like to indicate where we go from here and what our general time frame with the EIS process is. I indicate that the Draft EIS comment period closes on June 25th, two weeks from this evening. It is proposed that the final EIS be issued in September of 1985.

I think it's important to note that upon completion and approval of wasteload allocations for Pinellas County surface waters, an EIS supplement may be necessary to outline selected and EPA fundable wastewater management alternative options for north Pinellas County when that information is made available.

My comments, my brief comments, are concluded. I turn the meeting back over to Bob.

HEARING OFFICER:

Thank you for your brief comments, Ron.

I'd like to now ask Doug Bramlett of the DER for some comments from DER.

MR. BRAMLETT:

My name is Doug Bramlett. I represent the Tampa District Office of DER.

Just a couple brief statements about the wasteload allocation studies that are needed to be completed as soon as possible. I know that it's been some time since we've started these studies, and in talking to my bureau of water quality management this morning, the dates that they give me for completion for the final draft of the Tampa Bay wasteload allocation study will be in the summer of 1985. They cannot give me a month. I'm assuming they mean July or August of 1985. That'll be the final allocation study for Tampa Bay.

For the St. Joseph Sound and Clearwater Harbor study, they are projecting that a draft will be ready the first quarter of 1986, and a final allocation will be issued in the spring of 1986.

That basically is the only information I have about the studies and the completion dates.

If I can answer questions, I'll be glad to do the best that I can. I have not done these studies myself. I would probably have to just field your questions and then go to Tallahassee and try to get the answers for you.

HEARING OFFICER:

Thank you, Doug.

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I just want to remark a little bit about the process of wasteload allocations. It is not a very simple process, and when you're dealing with a system such as Tampa Bay with the resources that are there and the wastewater discharges we're talking about, it is not a very simple process, and I think we all should appreciate that this process does take quite a while to come to a conclusion.

Thank you, Doug.

I just want to encourage anybody who hasn't already done so, or if Lawrence Benander didn't catch you as you came in, to please register before you leave this evening. We'd like to have a complete record of everyone who was here.

Also, if you wish to speak and did not register, if you would let me know after the other speakers have talked, and I will call on you to speak.

I think, with the number of speakers that we have registered, I'm not going to limit any of the speakers in the length of their comments. I would say that if any speaker starts taking a great deal of time and the comments get very, very detailed, I may ask that you summarize your comments and please give us your more detailed comments in writing.

Also, if any of you have a written text of your comments as you're giving your comments, if you have an extra copy, please give us a copy so we can follow along, or after you've made your comments, if you could give us your written text, we'd appreciate that.

One other thing before we get started, when I call on people, if you'll please just come up and give me your name, and if you represent anyone, please just let us know who you represent, any group or organization.

And with that, let me call on our first speaker, Mary Mosley, representing CCAW.

MS. MOSLEY:

Mary Mosley, CCAW. I'd like to ask a question before we get started about Table 1. Am I led to believe that this is a little over 3 million gallons written here for the City of Tarpon Springs?

HEARING OFFICER:

What we have on this table, if you're looking in the first column, 1984 Capacity in MGD over 1984 Flow in MGD --

MS. MOSLEY:

Uh-huh (affirmatively).

HEARING OFFICER:

-- what we have there is, and let me make sure that I have this correct, the first number is the capacity of the plant; the second number is the actual flow that's in the plant.

MS. MOSLEY:

Well, EPA, that is not possible. I'm just --- I would like to be on record that the Tarpon Springs wastewater

CCAW-1 treatment plant was peaking at over 4 million in 1981, and I would just love to have EPA come and take a look at what's going on. It can't happen just bypassing in Pasco County.

I just want to ask one other question. We understand that EPA may be coming to Florida and perhaps our county -- is that true -- maybe putting a regional office?

HEARING OFFICER:

That's not true as far as I know.

MS. MOSLEY:

That's too bad. We really need a responsible and responsive agency here. Elected officials swear when they take office that they will protect the public health and welfare.

As you enter this county, you can see that the opposite holds true. Severe traffic problems, public service inadequacies, air pollution, and water restrictions are the norm. There are higher taxes and less of those reasons that we chose to live here.

A Gulf outfall would solve the politician's headache of what to do with wastewater from rampant, uncontrolled growth, but this could prove economically and environmentally disastrous.

This county's input at the public hearing that was held regarding the proposed state land use plan was to object to any outside control. This attitude has caused a systematic

CCAW-1. The values presented in Table 1 represent average flow, not peak flow.

and ongoing wasting of our natural resources. CCAW-2 Repair to a transmission line results in tens of thousands of gallons of raw sewage being released to the bay.

CCAW-3 A Gulf outfall could have potential impacts to beaches resulting in their being closed. Bacterial and viral contamination, over-enrichment with nutrients resulting in excessive phytoplankton growth impacts to reefs and marine systems may occur even with the best intentions.

CCAW-4 Our number one industry, tourism, would be seriously affected resulting in millions of dollars' revenue lost.

For years the Environmental Protection Agency and the Department of Environmental Regulation have been aware as to CCAW-5 the seriousness of water shortage. What would be more cost-effective and protect our Florida waters would be the reuse of water.

We urge you to implement this concept. The time for this idea is now, not after the developers have gone, and in their green wake they have left millions of new residents. Emergency measures never consider the environment. If the county lays new pipes for new development, why not lay the grounds for reuse.

Thank you.

HEARING OFFICER:

Thank you, Ms. Mosley.

My next speaker, I have a maybe listed here, so I'll

CCAW-2. EPA is not aware of raw sewage being discharged to Anclote Sound.

CCAW-3. These impacts are addressed in the Draft EIS.

CCAW-4. Comment noted.

CCAW-5. Comment noted.

go ahead and ask if they'd still like to speak.

Don McCullers?

MR. MCCULLERS:

I would like to wait and hear all the comments tonight.

HEARING OFFICER:

All right. I'll put you at the bottom of the list and call on you at the end.

The next speaker is Joe Preston.

MR. PRESTON:

My name is Joe Preston. I live in Eastlake. And I guess I'm more concerned about the statements that policy and regulations preclude any action by you people with respect to the discharge of effluent.

We're going to go from ten thousand people to eighty thousand people in a very short time. Studies that were conducted sometime ago by the county indicated that this explosion of eighty to a hundred thousand people will come sometime in the year 2000. It's happening right now. I think that my studies would show that probably, if not here now, it's going to occur by 1990.

JP-1

I can't understand -- and this is a question -- how you think, how you come to the conclusion that this is a future development. The people are moving in now. The five small treatment plants out there are keeping abreast of the situation, but every day they're moving in -- not hundreds of

JP-1. Population projections established by the Pinellas County Planning Department were used in the EIS.

people yet, but it's going to come, because there are -- developments are there, and the people are building.

JP-2 May I ask that question now? What promoted this conclusion that this is a future development, quotes, future?

HEARING OFFICER:

The conclusion comes from our population projections based on our existing population in the area and the fact that the existing populations are being served by existing treatment systems, which seem to be adequate at the time, and the need for additional capacity and additional facilities are based on population projections beyond that of 1990, population estimate.

MR. PRESTON:

JP-3 Are you saying 1990 is the future?

HEARING OFFICER:

1990 is the cutoff date for the availability of federal funds for any kind of wastewater treatment facilities.

MR. PRESTON:

If we have a hundred thousand people in the area by 1990, then the government's certainly missed the ball, and I don't know how you did your study, if you just took the statistics or if you cruised along in your car on 77 between State Route 582 and State Route 584; first of all, you'd probably be run over by the trucks that are supplying the construction in that area.

JP-2. The conclusion is based on the fact that existing populations are being served by existing wastewater treatment systems which appear adequate. The focus of facilities and capacity that is referred to in this comment are for future development, not existing development.

JP-3. Based on the recent Amendments to the Clean Water Act, EPA's Construction Grants Regulations allow EPA to fund facilities for flows existing on the date of Step 3 (construction) grant award, but not to exceed the year 1990 flows.

And everybody, it seems, except the federal government, knows that that's the fastest growing area in Pinellas County, so here we are with barely enough treatment plants. Just recently, in addition to the five that we're talking about, just recently Oldsmar has announced that they are at capacity, and I think Clearwater's in the same spot, and I would expect to hear tonight that Dunedin is in trouble, too.

Here we have this north, as I understand it, in the northern Pinellas area that you're studying that --- You're playing brinkmanship with this, and if you wait till 1990, you're going to be trying to play catch up, and I don't think you're ever going to make it, and I guess it's like being left alone in a raft without a paddle out there.

We just don't know --- We can't understand your conclusions. I've been coming to these meetings since 1968. It seems that your study has been, what I pick up, I can't fault that but -- and you've come to the conclusion, I think, that there's something needed, particularly in Eastlake, is that true? Is there something needed now in your opinion? JP-4

HEARING OFFICER:

I think our conclusion was that now the current systems that are in that area are providing satisfactory treatment.

MR. PRESTON:

Also in wet weather? I can't believe that. I can't believe you've come to that conclusion. JP-5

JP-4. The conclusion is that the current systems in the area east of Lake Tarpon are providing satisfactory wastewater treatment.

JP-5. Although it is generally recognized that it may be desirable in the Study Area to have a wet weather back-up, no data were found which showed the systems are not working satisfactorily during wet weather conditions.

HEARING OFFICER:

We don't have any information that disputes that.

MR. PRESTON:

Well, whatever, I ---

HEARING OFFICER:

We'd be happy to receive any information that you might have.

MR. PRESTON:

Well, I'm a private citizen. I'm going on my own investigations and comments from various people who manage these wastewater treatment plants.

And, for an example, I believe ten years ago it was recognized in that area, when the population was much less, that the treatment plant, one treatment plant, particularly in the Tarpon Lake Village Golf Course, was considered inadequate at that time, and there were plans to transport the wastewater, I guess to the Gulf, but certainly not on toward Clearwater and out through -- out toward St. Joseph Sound.

It seems that my information leads me to believe that the experts in Pinellas County believe that not only do we have to have something, some way of discharging the effluent, which is another matter, but we also have to have an improvement in the plant. Consolidation of the five plants perhaps is an answer. I gather that that's entirely out of your scope of

JP-6 concern, is that true?

HEARING OFFICER:

I might just remark that the overall construction grants program is based on a system of setting priorities at the state level. Those priorities are weighted based on existing problems for the most part. That is where they are having severe water quality or public health kinds of problems, and with the reduced amount of funding that we're having now coming from the Congress and the emphasis on cutting back on the role that the federal government's playing in this area, we're just seeing the priorities going to existing problems rather than providing additional funding to support growth and development in developing areas. It's just a fact of life today.

MR. PRESTON:

JP-7 In answer to that comment, would the federal government consider designating Florida, and perhaps the north Pinellas County, as being no longer available for development? Would you legislate against development there?

HEARING OFFICER:

EPA is not in the business of legislating for --

MR. PRESTON:

Well, wait. I didn't ---

HEARING OFFICER:

-- or against development.

JP-6. Consideration in the EIS was given to wastewater treatment plant consolidation.

JP-7. EPA does not nor does EPA possess the authority to legislate for or against development.

MR. PRESTON:

I didn't say EPA. You allude to the government --

HEARING OFFICER:

What we've come here ---

MR. PRESTON:

-- and you said the government's policy. Go ahead, sir. I'm sorry. I'm just trying to keep you under government policy, not on EPA.

HEARING OFFICER:

Right. What I'm trying to tell you is that EPA's policy regarding the funding and the use of 201 construction grants funds is that it will be used to correct existing problems, and it will not be used in the future for promoting and providing for future development.

MR. PRESTON:

I won't say it again. I just argue that we have an existing problem, not a 1990 problem, and regardless -- 'cause JP-8 your opinion and my opinion differ, of course. In your opinion, there is no existing problem. In my opinion, the problem is there and it exists today.

Well, the other problem that I see is in the transport of effluent somewhere into the Gulf waters or into -- by means of deep well injection.

Well, first of all, deep well injection in Eastlake doesn't seem to be feasible because that is very environmental

JP-8. Comment noted.

sensitive, as you probably know, and again I'm not the expert on that, so the alternative, as this other lady said, of transporting it into the Gulf depends on other studies, I gather, is that true?

In other words --- Let me try to simplify that question. JP-9 To discharge effluent into the Gulf four miles west of Honeymoon is not a proven solution, is it? Is it feasible? Is it environmentally sound?

HEARING OFFICER:

What we came up with is that, in the cost evaluation and the evaluation of environmental impacts comparing the discharge of wastewater to the Gulf versus the wastewater reuse alternative, we found the wastewater reuse alternative to be cost competitive and environmentally preferable.

MR. PRESTON:

Yes, but again, to make sure that I understand, that is with the exception of during the wet periods, because we JP-10 can't do anything with it. We have no storage area in Eastlake. Is that true?

HEARING OFFICER:

I think we recognize that at some point in time there will have to be some accommodations made for some wet weather discharge.

MR. PRESTON:

Well, I'll say it. It can't be deep well. I'll say

JP-9. The Draft EIS presents costs, environmental impacts and operation and implementation factors of Gulf outfall alternatives as well as other alternatives which were considered. The EIS contains several environmental statements concerning a Gulf outfall alternative (see page 12 of this document); however, no Gulf outfalls now exist in Region IV.

JP-10. The Draft EIS recognizes that some accommodations will have to be made for wet weather discharges in the future.

JP-11 it again, and the only other alternative is into the Gulf, and I don't think you've answered my question as to whether that is environmentally feasible.

HEARING OFFICER:

We don't have also wasteload allocations for discharge to nearshore surface waters for wet weather periods either. I think there are more than just the one alternative for Gulf outfall that you have suggested.

MR. PRESTON:

What are they? Have you mentioned them? Have I missed something? You said there are other alternatives?

HEARING OFFICER:

Nearshore discharges to surface waters and ---

Ron, do you have any help on that?

MR. MIKULAK:

Specifically, the intermittent discharge to nearshore surface waters, which hasn't yet been addressed by DER, and the wasteload allocation process may be an opportunity that ---

HEARING OFFICER:

I might remark one other thing on this whole area of wet weather discharge in the area, particularly east of Lake Tarpon.

This area's also a low lying area. It's one that has a number of wetlands. It's one that is an environmentally sensitive area, and I think the point here is that in the development of

JP-11. **Potential back-up alternatives include deep well injection (if proven feasible), intermittent surface water discharges (pending the availability of wasteload allocations) or the discharge of wastewater via a Gulf outfall.**

that area and the provision of wastewater facilities, I think it is a local issue and a local problem of coming up with the options and the approach to deal with that area if the local government wishes to develop that area.

MR. PRESTON:

Well, it's a disappointment that after -- what is it -- eight years of study, I think if not the most environmentally sensitive area, it's certainly among the most environmentally sensitive areas, and we're going to be faced, I gather, with having a lot of effluent, and we don't know what to do with it, and you people have studied it for eight years. It's not, in my opinion, a commendable conclusion, recognizing again the depth of your study and the things that you've done.

However, it seems that my investigation reveals that ten years ago that we could've come to the same conclusion with respect to Eastlake if not with respect to the rest of the north Pinellas area.

So it just seems -- and because of Eastlake, you can appreciate my concern -- a very insensitive approach. There's nothing --- You're saying you're going to create it, and you're going to have to do something with it.

HEARING OFFICER:

What I'm saying, too, is also that for the provision of wastewater facilities and for development, the local government has permitting responsibilities, the state has permitting responsibilities, and those permitting responsibilities are designed to protect environmentally sensitive areas and to approve or disapprove for the provision of wastewater facilities, and I am not in the position here to be challenging the authorities or the abilities of the local and state governments to meet that challenge.

MR. PRESTON:

Well, I understand that with respect to the grants --- I'm not going to say I understand. It seems to me that some place in this consideration that there is room for federal grant assistance, if not specifically for Eastlake, for the north Pinellas situation, and as I described earlier, it's not only Eastlake that we're talking about. The problem -- and I do recognize that you are looking forward to further action, JP-12 I believe, with the Oldsmar, Dunedin, and Clearwater problem with respect to wastewater -- management of wastewater treatment plants. Is that right? I just want to be fair to you.

HEARING OFFICER:

I think at this point in time we don't anticipate anything until we may have some wasteload allocations in ---

MR. PRESTON:

I understand that, but that's why I included future development, and that's a year away, and with the development impact that we expect immediately, your problem is going to be increased at least 15 or 20% within the next year. And after

JP-12. Conclusions and any grant assistance can not be made until wasteload allocations are available.

eight years' study, you can understand our concern about the lack of action in preparing for a problem of this type.

JP-13

Finally, one good size body of water is a consideration, Lake Tarpon. There's no way in my opinion, and I've been here for ten years, that unless something is done with the effluent that Lake Tarpon is going to suffer pollution, and whether that's a concern of yours, I'm not sure. You already said that's a local action.

But again, this study has been conducted, and my feeling is that it really hasn't in eight years produced anything of consequence, anything of benefit to the citizens of this particular part of the community.

HEARING OFFICER:

Thank you, Mr. Preston.

I think I might remark about this, that anytime we come to the conclusion that we're not going to be providing facilities or trying to promote or trying to support or even to solve the problems for future development, we have the same kind of issue and the same kind of concern, and I think that is the way that the 201 program and federal funding for wastewater facilities is going, and that is the intent and desire at this time of Congress, and this is not the same kind of construction grants program that we had, say, five or ten years ago.

Our next speaker is Dr. Robert J. --

JP-13. Comment noted.

DR. KUESTER:

Kuester.

HEARING OFFICER:

-- Kuester. Thank you very much.

DR. KUESTER:

My name is Dr. Robert Kuester. I'm from Dunedin, Florida. I've been civically active with the EIS program for practically since the time they came out, and I would like to take this opportunity to welcome you to the Suncoast.

We may be severe with you, but we also do it with the purpose, the same purpose, I'm sure, the reason you're here. I am, now that I've welcomed you, I'm going to proceed to lay you out. All right.

I'm rather disturbed that there are no elected officials here defensing the problem through the community. I don't know where they are, but they weren't here five years ago during the Carter times when this EIS came about, and they aren't here again, so apparently somebody in this county doesn't care about this water problem or isn't courageous to be a representative for us.

RK-1 I'm also a little bit disturbed at the lack of publicity that you people have put forth. I don't know what your publicity program is, but when you're speaking to a bunch of empty seats on probably one of the most important issues ever to come before the Suncoast, it bothers me, sir.

RK-1. Over 400 copies of the Draft EIS and announcement of the Public Hearing were sent out. Legal notices of the public hearing were published in local papers twice.

I would like to see you go out and make another public approach to a meeting and have one more meeting here and let some people come out here and hear what's going on, because not only are you developing a program, you have to educate the public, and if you don't educate the public to support you, RK-2 you're not going to have any support. You've got to have support, don't you? And if you're going to play to empty seats, you're not going to get that kind of support.

RK-3 I asked you five years ago, in my environmental concerns in Orlando, and I ask you now to please stop thinking in terms of turning one of Florida's most valuable assets, the Gulf of Mexico, into the world's largest swill pond, all right?

Number one, we don't need to contaminate the environment from the Environmental Protection Agency. I suggested then that you might be re-named the Environmental Destruction Agency, and here you are again doing the same thing. I object to it, and I'll tell you why in a minute.

Your newest EIS about north Pinellas County is a very incomplete document, even from a rank amateur in environmental problems. It is not the kind of document that should act as a nucleus or basis from which to determine wastewater management into the next century.

The conclusionary research facts are glaringly absent, being substituted by guesses and surmises and postulations and

RK-2. The EIS process is intended to both educate and involve the community in local wastewater management decisions. This effort culminates in the issuance of the Draft EIS for review and comment. The purpose of the Public Hearing is to receive comments on the Draft EIS.

RK-3. Comment noted.

theories, maybes, would've's, could've's, should've's. I mean, we need some facts here that will give us long-range conclusions that will be publicly acceptable.

I grieve when I talk to a municipal engineer who looks at this Environmental Impact Statement and says it's an atrocious document. I feel badly that more intense research is not or has not been done up to this point.

I could go through this whole book, but I want to give you just one or two little items of what I'm talking about, and I'll be glad to meet with you at greater length.

Take this one. Wide-ranging and absolute conclusions cannot be made about effects of nearshore hydrodynamics on potential movement of a wastewater plume.

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RK-4

You're going to put the water out in the Gulf of Mexico and you don't know where it's going, and you're telling me that's what you've got cost basis on? I can't buy it, sir. You're going to have to tell me more about what's happening, what's happening hydrodynamically out there, or you're not going to go out there.

One other --- I could go for hours on this. We talked about --- You talked about things here that you admit to. Data from less than ten days during only one spring and one full season was available; three sampling transects are ten miles apart on the north side of our axis; dye releases were not monitored during all types of wind conditions; nearshore water

RK-4. The costs are based on a large number of factors including: level of treatment, outfall size, length of outfall, construction technique (buried or unburied), etc. The cost factors can be developed to serve as a basis of comparison in order to compare the Gulf outfall alternative with other disposal alternatives.

movements have been measured by metered data and have been found to be highly variable; variable conditions are evident -- so on and so on.

RK-5 How can you do anything about a Gulf outfall when you talk about the preponderance of limitations and dangers but not positive proven facts that lead to proper conclusions? You can't do that to us.

Now, if ever there was an ideal time, a point in time in history for you to come to the Suncoast, I think you've picked it. I think you really nailed it right on the head.

Right now the Suncoast quality of life is eroding for lack of water during the present drought that is absolutely probably the worst one we've had this century, not necessarily the worst drought but the worst to make people suffer because we've got so many people here now, you see.

Now, you simply cannot afford the luxury of dumping reusable wastewater into the Gulf until such a time you can prove the hydrodynamic and economic feasibility and until we can come up with a new water supply. We cannot afford to waste water that is reusable in anything, especially since

RK-6 we're short of water now. Does it make sense, or am I talking on something, you know, I'm way out in left field on?

HEARING OFFICER:

I'm very glad that you're supporting our conclusions.

DR. KUESTER:

RK-5. A marine sampling and measurement program off Northern Pinellas County (Florida) was conducted to provide baseline information for the assessment of environmental impacts from a proposed offshore sewage outfall (one of the alternatives being considered for handling the wastewater of North Pinellas County).

The program collected physical, meteorological, chemical, biological and sediment data from a 512 square kilometer Study Area in the Gulf of Mexico from Anclote Key (north) to Belleair Causeway (south) and up to 16 kilometers offshore from the barrier islands off Northern Pinellas County. Specifically, physical studies included description of bathymetry and bottom habitats, and the measurement of currents (speed and direction) in the Study Area. Meteorological measurements included wind speed and direction, air and surface water temperature, and cloud cover. Chemical studies included the measurement of dissolved oxygen, salinity, temperature, biochemical oxygen demand (BOD_{20}), total suspended solids (TSS), and micronutrients (nitrogen and phosphorus). Biological studies included the general biological characterization of habitats, a description of rare, threatened and endangered species, fecal and total coliform bacteria, chlorophyll 'a' and phytoplankton, zooplankton, benthic fauna and a description of the four artificial reefs in the Study Area. Sediment studies included the description of granulometry (grain size distribution) and volatile organic content. Depth profile measurements were made for chemical and current studies. Data were collected from three east-west transects within the Study Area (except for the artificial reefs study and the current study, where two additional transects were sampled).

Data from the sampling program can be utilized to describe the local Gulf environment and to make preliminary conclusions concerning a Gulf outfall. The study limitations need to be clearly understood in order to properly use the data generated by the sampling program.

The EIS also points out that additional site specific studies concerning outfall alignments, and point of discharge and that additional permit/administrative reviews and approvals would be needed if a Gulf outfall alternative would receive further consideration. Any additional efforts would then supplement the EIS sampling program and would likely address the EIS study limitations.

RK-6. The EIS identifies the wastewater reuse alternative as the environmentally preferred alternative.

The conclusion here is wrong. Now, you've still got
this Gulf outfall here as a backup outfall, and I suspect
that's where it's all going to go eventually, because five
years ago you fellows had everything going into the Honeymoon
RK-7 Island outfall from Tarpon, Oldsmar, Safety Harbor, Clearwater,
and it looks like that's going to be a backup once again,
right?

And the present drought has proven beyond a doubt
that Florida's wells and aquifers cannot be depended upon to
provide all the needed water in the future, especially since
potable water requirements are constantly increasing because
RK-8 of rapid growth of the area, and, sir, I appreciate you
putting down here that you are going to do something here
that removes development constraints. My god, please take
a walk around or ride around Pinellas County. We've already
become a stuffed sardine can with development.

We've got all these comprehensive land use plans, and
all they do is juggle them around and do anything they wanted
to, and they rape our environment, they clutter us with roads,
they clutter us with these sewage problems, they constantly
go forever without conclusion, satisfactory conclusions.

RK-9 I recommend, sir, that you help us develop new water
supplies. That's number one. If we don't have new water,
we're not going to have anything to dump. I mean, the present
aquifers and well systems are inadequate, all right, so help

RK-7. Potential wet weather back-ups include deep well injection, intermittent surface water discharges or a Gulf outfall. Numerous factors including technical feasibility, institutional constraints, water quality impacts, and cost will determine the most appropriate back-up alternative. A reuse alternative would not necessarily utilize a Gulf outfall as a back-up discharge method.

RK-8. Potential disadvantages and advantages of all alternatives are recognized in the Draft EIS.

RK-9. EPA has no program and no authority directed toward the development of new water supplies.

us develop new water supplies to meet human needs, and then in the interim I want you to do everything you can to conserve every drop of wastewater, at least until such time an abundance of potable water supply has been developed.

RK-10 Accordingly, I sincerely request that you stop all wastewater dumping into the Gulf of Mexico under any and all circumstances, and I'll be glad to answer any questions.

There is one thing here. The gentleman asked a question about what the other alternatives were. Well, you and I know we do have limited alternatives, but that doesn't mean we can't expand them, and the alternatives are recharging groundwater areas and recharging wetlands, which we haven't even touched yet, and recharging flood plains.

RK-11 And I want to thank you again for taking my recommendation to start recharging wells, but don't forget to purify the water before you put it in there, because it's not going to leach out, all right?

Thank you.

HEARING OFFICER:

Thank you, Mr. Kuester.

Again, I want to say that EPA fully supports the comments that Dr. Kuester has made, that our conclusions are that yes, indeed, this is an area where wastewater reuse and conservation are very important issues, and I, too, am disappointed that we don't have more of a turnout. I appreciate

RK-10. Currently, wastewater is not being discharged into the Gulf of Mexico off of the coast of Florida.

RK-11. Comment noted.

your comments.

I have another maybe. Mr. Todd Tanberg, do you wish to make any comments?

MR. TANBERG:

Maybe after. Let me hold my comments.

HEARING OFFICER:

Maybe later. I have another maybe, Mary James.

MS. JAMES:

I have no comment at this time. I'd like you to keep on. I wish you'd get the county commission out here.

HEARING OFFICER:

Would you like for me to come back to you at the end, or ---

MS. JAMES:

No. That's all right.

HEARING OFFICER:

Mr. Robert Williams? I might make one other comment while you're coming up, and that is EPA does not have any authority to develop water supplies. We have no program that's involved in developing water supplies, although for the area it sounds like it might be a very good idea.

DR. KUESTER:

Time to start.

HEARING OFFICER:

Mr. Williams?

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MR. WILLIAMS:

Mr. Chairman, Mr. Mikulak, Mr. Bramlett ---

My name is Robert L. Williams, and I'm a PE but not appearing in that capacity. I am president of the Northeast Pinellas County Water/Sewer Authority. Unofficially I represent the mayor of Oldsmar, who happens to be my wife, and I want to apologize for her. She has to preside over the City Council tonight and could not be here nor could any of the elected officials be here because of shirking their regular duties, so that's one of the reasons I'm here.

Just a little bit of background. I am perhaps one of the most intensely interested participants in the entire original 201 study. I was mayor of Oldsmar at that time and one of the four major participants.

I was very happy to see that in your EIS you use the logical engineering conclusions from the 201 and not that aborted last-minute attempt to change it.

Oldsmar's interest is perhaps more intense than any other people in this room. We're in the area that's growing fast, and we are involved in both, I believe you call your Tampa Bay area and your Eastlake area, and no matter what one says, you can no more stop the development in that area than the guy who is holding back the tide in the old fairy story.

I have to agree with Mr. Preston on the needs in that area and that they are here now, and if we can get funded for the 1990 level, we will be happy, because by that time it's going to be so far out of these projections. Now, as I said, I'm intimately familiar with the 201. I know what the projections were based on.

We engineers at that time knew that they were far below what we knew were going to be there as local people, but I agree that that's the rules, and in order for the study to be representative of the entire area, everyone used those rules.

The Oldsmar plant was built and approved back in the early seventies as a regional advanced water treatment plant. It was built on the bay because AWT was to be discharged into the bay. We were misled. That plant was designed and partially built with a capacity of 12 million gallons a day. At that time of the study, we were 1 million gallons a day. We were not AWT, but we do treat our water, and I think Mr. Bramlett can testify to this, at far higher levels than our permit requires and would continue to do so regardless of our size.

Our plant was built with no federal funds. Everybody else in the area has federal funds in their plant. Our poor people are having to pay for it, and I was bitterly disappointed when the 201 study was derailed, but we do need federal funds in order to be cost effective with our neighbors.

I'm glad that you recognize the difficulties in the Eastlake area, and Eastlake just comes right on down to us. I don't know exactly where you draw the line between Eastlake and

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Tampa Bay, but we do need some workable answers to that area, and we need them now.

Again, I might say -- someone said earlier -- Mr. Preston recognized that we are up against the wall right now. It's growing faster than we had anticipated and having no federal funds, the town having no money until it did grow, we couldn't prepare in advance, although we knew full well, and I worked hard on this for three and a half years while I was mayor, and I could get nowhere except our own little things that we could do. We dug our ponds a little bigger. We built our berms and things like that in order to try to do what we could to hold back the tide that was coming, but we have no places to put our water now.

I-1

We have considered various alternatives. We agreed with the 201 study that the land reuse was the most desirable, still is the most desirable. We don't want to put our water in the bay even accidentally. We want to reuse it. The area to the north of us is the only place that's viable for reuse. Our groundwater table is only about 3 feet, maybe 4 at the most, below the surface which doesn't give us much room for percolation.

We do have ponds, 16 acres of ponds, where we can store some water. We would hope to be able to pump that out into that Eastlake area, spread it out, and make some use of it, at the same time serving our purpose.

CO-1. Comment noted.

We don't really want to take the nitrogen and phosphorous out of it either, because that's what makes things grow. We have people all over our area, including my own wife, that's asked me why can't I have some of that water; we'll reuse it.

Our ordinances and our subdivision development regulations, and Bill, you might correct me if I'm wrong, I believe they now include requirements for a gray water distribution system in new subdivisions, looking toward this reuse of water.

We have the problem, as I said, immediately, though, and again we don't want to send it to the bay, although we are interested as a, shall we say, a near-term solution. We had hoped that we could get some type of wasteload out of that Tampa Bay study, but I don't know whether that's going to come in time to help us or not, and I don't know that we are still in the study even. I might ask that question if Mr. Bramlett knows. I have heard rumors that Oldsmar was just out of it. CO-2

MR. BRAMLETT:

That you're out of the study for Tampa Bay, out of the allocation study?

MR. WILLIAMS:

Out of the possibility of receiving ---

MR. BRAMLETT:

I'm not aware of that. There's a draft allocation out which calls for no discharge, but that's not the final document. As I said before, the final document should be out in July or

CO-2. See Mr. Bramlett's responses on pages 60-61.

August of this year.

MR. WILLIAMS:

CO-3 Is there anything that would make us think that final document might be different?

MR. BRAMLETT:

No, sir, not to my knowledge.

MR. WILLIAMS:

That's what I was afraid of. So that's not an answer. We have to have a different answer. We are working with the developers in this area. As I said, they're coming just like the tide comes. They are being very cooperative. They have asked us what they need to do to help us.

We are attempting to work something with them, but our hands are tied unless the wetlands and the general distribution of water in the sensitive area is brought on line, and that's our major concern right now.

We don't want to discharge it, spray irrigation, 200 feet from the bay. 250, I believe, is the minimum. We don't want to put it there. We want to put it further upstream. If it ever does get to the bay, and to my knowledge nobody has ever made a study and showed that we have ever polluted the bay at that point, CO-4 and we'd like to return to the land, and I don't see anything in the EIS study that encourages that there might be some further interest on the part of the federal government in that area. I wish there were, and I would hope that perhaps

CO-3. See Mr. Bramlett's response on this page.

CO-4. Both land application and reuse alternatives are considered in the EIS, with the wastewater reuse alternative being identified as the environmentally preferred alternative.

you could carry that back, because I think this is a legitimate concern both to us locally and to the federal government from the standpoint that there are a lot of people, there are industries and there are business concerns there.

We don't have enough money to just stay around and wait for the solution of some of these things. We need some solutions now. We have obligated ourselves to a bond issue to complete some of the structures in our plant, to rehabilitate some of the structures in our plant and to provide some provisions for effluent. We'd like to see that effluent go north in a permanent way rather than just spraying it willy-nilly.

Land for doing this is not really available. If it is, it's at a premium, which the city can't afford, so again this comes back to the federal government's concern with people who are poor and can't afford things. I think we'll qualify.

There is a possibility of cooperation with large land owners north of the town in the Eastlake area, and finally I might say, go on record, it's my opinion that the solution to CO-5 this is none of the above. The solution is building a water treatment plant right next to our sewage treatment plant and reusing the water. We have the land for it, and we'd like to have the funds for it.

Thank you.

HEARING OFFICER:

Thank you, Mr. Williams.

CO-5. Comment noted.

Another thing I might remark on regarding this relationship between water supply and wastewater disposal, some of the information that we received regarding this area and the use of water supply indicates that somewhere between a quarter and a third or maybe as much as 40% of the water usage in this area is related to watering of grass and outdoor use of water, which is non-potable uses of water, and this is one large area with wastewater reuse that potentially could be tapped.

I am now back to the first maybe. Don McCullers, did you want to say something?

MR. MCCULLERS:

I have some comments I'd like to make and also ask a couple questions if I possibly can.

HEARING OFFICER:

You may ask them. I'm not sure we can answer them.

MR. MCCULLERS:

CO-6 Okay. That's fine. I'd like to ask them anyway. You said that the wasteload allocation of upper Tampa Bay would be completed sometime this summer. I'd like to know if your department will hold back on your final draft of the EIS until that wasteload allocation is approved.

HEARING OFFICER:

All I can say is we're going to close the comment period on June 25th. We intend to go ahead and finalize the EIS. If the state is particularly interested in its services

CO-6. EPA intends to finalize the EIS. If needed, the EIS will be supplemented when wasteload allocations for Pinellas County surface waters are available.

to us to maybe consider some other option, we may consider that. We have been keeping this EIS open for quite a long time. We have a contractor that we've been dealing with, that we've been keeping on for quite a long time, and for our own reasons and our own needs, we would like to move on to complete this EIS.

We would be in a position, when we do have wasteload allocations, we have a position where we can make some final conclusions, that we would be moving to make those conclusions.

So that's about all I can say on that.

MR. MCCULLERS:

One of my concerns is the area east of Lake Tarpon, and there appears to be quite a few concerns of the audience tonight. It's one of the most environmentally sensitive lands that Pinellas County has left.

Yet, in the draft EIS, and maybe this is a good time for somebody to stand up and go against possibly their own policy, in the draft EIS it says you would not recommend any funding of the EPA monies to the area east of Lake Tarpon and made the comment tonight that the only way anybody could get any funding from EPA, which seems to hold true, is that you have to have a problem.

I'd like to kind of try to see that role reversed so that we could take care of the problems before we present the problems. Maybe that would be a good time to have -- to recommend to EPA that you fund some of these areas. Reuse, without a doubt, you're going to have to get into a reuse-type situation. Like quite a few people have stated tonight, you've got, you know, one of the worst dry spells that we've been through in a few years in this area.

Go into the possibility of spray irrigation on the land. Go --- Think of the possibility of recharging Cypress Head so that our forestry people here don't have to go out and fight the fires, that if you had some of this water there available, you would not have half these problems, but at the same time why not get EPA's involvement in your most environmentally sensitive lands before you have a problem, so that the environmentally preferred alternatives, which is what everything is about in this study, can be enacted before you have to come back and correct the problems at a higher cost. Then you could go in and you could do a very sufficient job of doing now.

CO-7 I think that the role on that should actually be reversed a little bit. Why don't you stop the problem before you create a problem.

HEARING OFFICER:

I might ask, I've been hearing this all along, that there's going to be a big problem, and I might just ask, we have local ordinances and requirements regarding the use of on-lot systems. We have permitting responsibilities from the State of Florida on surface water discharges, and it is not clear to me what kind of a problem it is that we're really

CO-7. The Clean Water Act and EPA Construction Grants Regulations are specific in that EPA grant funds are available to assist municipalities in correcting existing water quality and public health problems. Wastewater flows existing at the time of Step 3 grant (construction) award, but not to exceed the year 1990 flows are eligible for EPA funding.

talking about in the future for this area, and maybe I just don't understand.

MR. MCCULLERS:

Well, Mr. Bisterfeld when he first started this whole study, he did not either until one day we took him to the area, and he says Wow, is that the area that I looked at a year and a half ago? You know, the rapid growth of all of Pinellas County as well as Florida is so tremendous that what Mr. Williams got through saying, I do not perceive far down CO-8 the road. You're going to treat wastewater here. You're going to have to recycle it back out through a public plant. I mean, the times are coming.

There is technology that can be done for that. In reality it's been done for years, and the public is just not aware about it.

CO-9 The reuse estimates for the spray irrigation, are those updated costs or are these still the 1980 figures?

HEARING OFFICER:

(Nods head affirmatively)

MR. MCCULLERS:

They're the 1980 figures? The package plants ---

MR. MIKULAK:

Don, if I might inject something. All costs that we discuss in the EIS at this time are the 1980 figures and have not been updated --

CO-8. Comment noted.

CO-9. The costs presented for spray irrigation are 1980 costs.

MR. MCCULLERS:

I thought they were.

MR. MIKULAK:

-- updated at all.

MR. MCCULLERS:

I've seen that some of the flows and some of the other numbers in the study had been, it appeared to me, that they had been adjusted.

MR. MIKULAK:

The flows have been corrected, but to go back and readjust all the costs of the alternatives did not seem to be a cost-effective activity involved, but the costs are still internally consistent; that is, when you compare the cost of one alternative to another and try to rank them, they're still internally consistent, but they are still 1980 dollars.

MR. MCCULLERS:

There's one statement in here, and maybe I'd like to speak to Mr. Bramlett about this if I could possibly, is --- And I'm not out to throw any stones at anybody. I want everybody to be understanding of that.

CO-10

The Clearwater Northeast plant, will that be allowed to discharge their effluent from that plant through the Clearwater East plant, or is that considered a new discharge?

MR. BRAMLETT:

Will be allowed to discharge if the allocation allows the

CO-10. See Mr. Bramlett's response on pages 67-68.

discharge, you mean?

MR. MCCULLERS:

The way it's presently operating, yes, sir.

MR. BRAMLETT:

If the allocation gives them a discharge, I'm assuming that it would.

MR. MCCULLERS:

Would that constitute --

MR. BRAMLETT:

I don't know --

MR. MCCULLERS:

-- in your office --

MR. BRAMLETT:

-- for a fact, though.

MR. MCCULLERS:

-- a new discharge? Although you've got one treatment plant to the south, you've got a treatment plant to the north, you've created a new treatment plant to the north after certain rules and regulations were in effect.

MR. BRAMLETT:

Right.

MR. MCCULLERS:

CO-11 Will that now be considered a new discharge through the Clearwater East plant on the Courtney-Campbell Causeway?

MR. BRAMLETT:

CO-11. See Mr. Bramlett's response on pages 68-69.

I don't think I can answer that. I don't know the answer. I can find out for you.

MR. MCCULLERS:

Can you find out for me, please?

MR. BRAMLETT:

Yes.

MR. MCCULLERS:

I've been trying to get that answer for sometime, and I cannot. I would like to know that.

CO-12 I would still like to express my opinion. I think that the track of effluent reuse is the only way that you have to go that has to be wet-weather back-up alternatives. Everybody has proven that. I mean, it's a growing way, with the rapid people and the amount of people that's moving into the State of Florida everyday, particularly to Pinellas County and the Tampa Bay area, I'm kind of disappointed that the EIS, and this has been quite a concern in the past, it does not include CO-13 more than just Pinellas County. I think it should include the whole Tampa Bay nucleus area, from Oldsmar to Tampa to Safety Harbor, Palm Harbor, and Clearwater. I think the whole thing should be considered, but I would really like to see the wording in the drafted EIS change so that EPA is CO-14 recommending to EPA that they do fund the areas east of Lake Tarpon, so that the environmentally preferred alternatives can be initiated.

CO-12. Comment noted.

CO-13. The EIS covers the entire North Pinellas County 201 Study Area and the Clearwater and Safety Harbor portions of the Central Pinellas County 201 Study Area.

CO-14. The environmentally preferred alternative is for the most part now being implemented in the area east of Lake Tarpon by several existing facilities. This practice can and will likely continue without EPA funding. In addition to the eligibility limitations of future facilities, EPA policy and regulations also address funding in environmentally sensitive areas. The area east of Lake Tarpon is comprised of roughly 30 percent of wetlands and floodplains. County wellfields and groundwater recharge areas are also located here. The presence of these environmentally sensitive features further limits EPA's participation in funding wastewater facilities.

Wastewater reuse is very costly; once it's implemented, it's probably the greatest thing that there is. It is very, very costly. The figures on the flows have been updated. CO-15 The costs on the installation of these systems have not been updated. I think that's very misleading.

CO-16 I think it's also misleading to try to finalize this statement seeing as how we --- Everybody has put so much effort into this over the past few years that we're so close now to possibly having a wasteload allocation in the bay, you cannot make any determined findings on this document here until the Department of Environmental Regulation completes the wasteload allocation study of Tampa Bay.

Thank you.

HEARING OFFICER:

Thank you, Don.

Mr. Tanberg, do you now wish to make any comments?

MR. TANBERG:

My name is Todd Tanberg. I'm the director of the Pinellas County Sewer Department.

PCSS-1 As we understood the purpose of the EIS as originally stated some six-odd years ago, was for the purpose of confirming the recommendations of the north Pinellas 201 facilities planning study.

That final recommendation, of course, was for water reuse, spray irrigation if you will, with a back-up method of effluent

CO-15. The costs are still internally consistent, that is, when you compare the cost of one alternative to another and try to rank them, they are still internally consistent.

CO-16. As indicated by Mr. Bramlett, the Tampa Bay wasteload allocation is expected to be available sometime later in 1985 and the Clearwater Harbor - St. Joseph Sound wasteload allocation will not be available at least until the middle of 1986. Once there are approved wasteload allocations, conclusions can be made for the remaining subareas. If necessary, an EIS supplement will be prepared incorporating approved wasteload allocations.

PCSS-1. The purpose of the EIS is not to confirm the 201 Plan recommendations, but rather to develop and evaluate wastewater management alternatives leading to the selection of the most cost effective environmentally sound alternative.

disposal being Gulf outfall.

The EIS, draft EIS, as we review it, in our opinion, does not fulfill the purpose of that original -- the original purpose of proceeding with the EIS.

We are operators of wastewater treatment facilities. We don't control growth. However, we are scrambling to provide services for those who are coming into the county to live.

Eastlake Tarpon is an area that is the most rapidly PCSS-2 growing in the county, and this is where our attentions are being focused today. This area of the county is notable in the EIS and by lack of being addressed in detail in the PCSS-3 document. The county endorses water reuse, and we intend to reuse that treated effluent wherever possible.

However, we do need to have defined for us that intermittent discharge that we can use during wet weather. Historically, 50% of the county's rainfall comes in three or four months a year, summer months. During those months, we can't force effluent out of the bay on the people who use it throughout the year.

We are experiencing right now some severe drought conditions. Everybody is screaming for treated effluent; we'd love to have it. Number one, there's a lot of rain. Golf courses don't want any more than Mother Nature gives them, and that's our problem. In those times we need intermittent

PCSS-2 Wastewater management alternatives for the area east of Lake Tarpon are addressed in the EIS. The No Federal Action alternative has been selected for this portion of the Study Area. The selection of the No Federal Action alternative should not be construed as being addressed in insufficient detail.

PCSS-3. Comment noted.

discharge.

PCSS-4 We are enthusiastic about other alternatives for disposal of effluent. Dr. Kuester mentioned wetlands discharge of effluent. We have looked into that. We have looked into a number of other alternatives. Unfortunately, we are being discouraged and frustrated by the current rules, regulations, and policies of the state.

PCSS-5 We had hoped that the EIS would resolve some of these types of issues. We had no approved intermittent back-up method of discharge after the 201 was completed.

Now, after the six-year effort on the EIS, we still are left without an approved back-up method for effluent disposal during those months of the year when water reuse is not practical.

I think in conclusion I'd just like to say that due to the study, in our opinion, not fulfilling the original intended PCSS-6 purpose -- that is, to confirm the recommendations of the north Pinellas 201 plan -- Pinellas County will not be able to endorse this EIS document.

Thank you.

HEARING OFFICER:

Thank you, Mr. Tanberg.

I have to agree with, I think, most of the comments that I'm hearing here, except for a couple of them, and the only reason I won't agree with them is that I can't agree with them,

PCSS-4. Comment noted.

PCSS-5. This type of alternative can not be fully considered until approved wasteload allocations are available.

PCSS-6. Comment noted.

because I am limited by our policy and the directions of Congress.

But I would like to say that what I've heard this evening, or at least what I believe I've heard this evening, is that everyone who's spoken has endorsed the concept of recycling and reusing wastewater, that there is a direct relationship and a link in this area between water supply and wastewater supplies and wastewater reuse, and that I thought I heard everyone say that yes, this is the way that this particular issue's been going.

I think, if you look at the conclusions in the EIS, you will find that that is the heart of the EIS and the recommendations that are contained therein, and I'm very pleased that we're hearing support for that conclusion.

I think also, regarding Mr. Tanberg's comments that we don't yet have all the answers that we'd like to have, I think we share, and I think the state shares some of that same disappointment as we are here today, that we don't have those answers, and this is not a simple particular issue. I think if it had been simple, it would've been answered.

We are hopeful that with the availability of wasteload allocations in the very near future that we may be able to reach conclusions and come to answers regarding the questions that you had.

With that, I'll just ask if there's anyone else who didn't register to speak that maybe, hearing all the discussion and comments that've been made, if now they might like to stand up and have a few words. Is there anyone else who might like to ---

Yes, sir. Would you state your name and who you represent if you represent anyone?

MR. BOYD:

Mr. Mikulak, Mr. Howard, Mr. Bramlett, my name is Alfred Boyd. I am very familiar with the Eastlake area. I had one tract of land out there, and my ownership was 6,000 acres. My dad had 16,000 acres in the Eastlake area.

We know the situation quite well. Now, I think that perhaps you gentlemen working under the Environmental Protection Agency are charged with protecting our environment.

I would like to ask you, have you studied the source of much of our contamination in Lake Tarpon? Your maps --- I have not had a chance to study this book; I just picked it up AB-1 this evening, but so far I have not been able to find anything that you have investigated across the Hillsborough County line.

Today Lake Tarpon is covered with algae in much of the area, which is showing pollution. It may not yet be dangerous to human habitants of the area, and yet it can be. That's one main point I think that you might have missed.

There is a drop from the source of Booker Creek which flows into Lake Tarpon approximately 33 feet. The flow in the

AB-1. The EIS covers the entire North Pinellas County 201 Study Area and the Clearwater and Safety Harbor portion of the Central Pinellas County 201 Study Area.

AB-2

wet season is tremendous. All the effluent from the septic tanks and discharge from various sources are going to flow down Booker Creek and into Lake Tarpon, out the outfall canal into Old Tampa Bay. That cannot be disputed.

The Pinellas County Commission has recently purchased considerable acreage in that area for environmental protection.

Now, I charge you men to investigate our source of much pollution and see if we can eliminate some of that through cooperation with Hillsborough County. We have been at war more or less with the Hillsborough County Commissioners over the possible pollution of our water supply in the Eldridge wild fields.

AB-3

Now, Booker Creek flows very close to that water supply that we are drinking everyday. I think it behooves us to work on protecting our drinking water supply first and foremost.

Thank you, sir.

HEARING OFFICER:

Thank you.

Is there anyone else who, hearing these comments, would like to stand up and make some additional comments?

(No response)

I want to say I appreciate all the speakers standing up and talking with us, and this public hearing record will remain open until June 25th, 1985, and I would encourage anyone here who would like to, to please provide your comments in writing.

AB-2. To date, there has not been a documented problem with septic tank effluent reaching Brooker Creek. Treatment plants do not discharge treated effluent to Brooker Creek.

AB-3. Comment noted.

If you have any other comments that you'd like to make that you either didn't think of here or come to you after this meeting, please contact us with those comments by June 25th.

All written comments received will be considered as part of the record, and you should forward them to Mr. Mikulak. His address is on the bottom of your agenda, your handout, that you have received.

I want to thank you again for coming. I really do appreciate your coming. Atlanta is a long way from Clearwater, north Pinellas area, and without your coming and talking to us, it makes our job much more difficult.

The final EIS that will be coming out in September will consist of the agency's final decision, a summary of the draft EIS, any pertinent additional information or evaluations that are developed since the draft is published, revisions to the draft, comments that were received on the draft and the EPA's responses to those comments, and a transcript of this hearing.

Those of you who commented here tonight will receive a copy of the final EIS. I'd also like to thank Pinellas County for making these facilities available. They're fine facilities and we really do appreciate it.

Again, thank you for your attendance, and this hearing is adjourned.

(Whereupon, the above-entitled public hearing was concluded at 9:10 p.m.)

CERTIFICATE OF REPORTER

This is to certify that the attached proceedings before THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Pinellas County Courthouse
Clearwater, Florida

7:30 p.m.

June 11, 1985

were held as herein appears and that this is the official transcript of the proceedings for the file of the Agency.

ANNE JAPOUR
Certified Verbatim Reporter

BAY PARK REPORTING
COURT REPORTING
11 FOURTH STREET NORTH
ST PETERSBURG FLORIDA 33701
(813) 823-8388

TABLE 4

INDEX TO WRITTEN COMMENTS ON NORTH PINELLAS COUNTY DRAFT EIS

Comment Code	Page(s)	Commentor	Nature of Comment
DER-1	83	Florida Department of Environmental Resources	Support reuse
TBRPC-1	85	Tampa Bay Regional Planning Commission	Consistency with Council policies
TBRPC-2	86	Tampa Bay Regional Planning Commission	Review of discharge to coastal waters
TBRPC-3	86	Tampa Bay Regional Planning Commission	Review of discharge to Gulf
TBRPC-4	86	Tampa Bay Regional Planning Commission	Review of deep well injection
TBRPC-5	86	Tampa Bay Regional Planning Commission	Review of land application
TBRPC-6	87	Tampa Bay Regional Planning Commission	Review of reuse
TBRPC-7	87	Tampa Bay Regional Planning Commission	Expand reuse alternative
TBRPC-8	87	Tampa Bay Regional Planning Commission	Support reuse with deepwell backup
TBRPC-9	87	Tampa Bay Regional Planning Commission	Consideration of local comments
PCSS-1	88	Pinellas County Sewer System	Accomplishment of EIS purposes
PCSS-2	88	Pinellas County Sewer System	Accomplishment of EIS purposes
PCSS-3	88	Pinellas County Sewer System	Area east of Lake Tarpon recommendations
PCSS-4	88	Pinellas County Sewer System	Intermittent wet weather discharge
PCSS-5	88	Pinellas County Sewer System	Ownership of small plants
PCSS-6	88	Pinellas County Sewer System	EIS recommendations

TABLE 4 (Cont'd.)

INDEX TO WRITTEN COMMENTS ON NORTH PINELLAS COUNTY DRAFT EIS

Comment Code	Page(s)	Commentor	Nature of Comment
CD-1	89	City of Dunedin	Support of alternative
CD-2	89	City of Dunedin	Support of reuse
CC-1	90	City of Clearwater	EIS recommendations
CC-2	90	City of Clearwater	EIS emphasis
CC-3	90	City of Clearwater	Funding of wasteload allocation studies
CC-4	90	City of Clearwater	Delay Final EIS
CC-5	91	City of Clearwater	Consideration of private treatment plants
CC-6	91	City of Clearwater	Consideration of private treatment plants
CC-7	91	City of Clearwater	Existing land application site
CC-8	91	City of Clearwater	Connection/impact fees
CC-9	91	City of Clearwater	Wasteload allocation process
CC-10	91	City of Clearwater	Safety Harbor wastewater treatment plant
CC-11	91	City of Clearwater	Wastewater disposal alternatives considered
CC-12	91	City of Clearwater	Intermittent wet weather discharge
CC-13	92	City of Clearwater	Support basis of wasteload allocation studies
CC-14	92	City of Clearwater	Safety Harbor wastewater treatment plant
CC-15	92	City of Clearwater	Relevance of management findings
CC-16	92	City of Clearwater	Land application design
CC-17	92	City of Clearwater	Intermittent wet weather discharge
CC-18	92	City of Clearwater	Description of treatment plant
CC-19	92	City of Clearwater	Description of treatment plant
CC-20	92	City of Clearwater	Land application operation
CC-21	93	City of Clearwater	Screening of wastewater disposal alternatives
CC-22	93	City of Clearwater	Wastewater disposal alternatives considered
CC-23	93	City of Clearwater	Outdated costs
CC-24	93	City of Clearwater	User charge variance

TABLE 4 (Cont'd.)

INDEX TO WRITTEN COMMENTS ON NORTH PINELLAS COUNTY DRAFT EIS

Comment Code	Page(s)	Commentor	Nature of Comment
CC-25	93	City of Clearwater	Outdated costs
CC-26	93	City of Clearwater	Gulf outfall impacts
CC-27	93	City of Clearwater	Existing land application sites
CC-28	93	City of Clearwater	Safety Harbor wastewater treatment plant
CC-29	93	City of Clearwater	Outdated data
CC-30	93	City of Clearwater	Outdated data
CC-31	94	City of Clearwater	Gulf outfall effluent additional treatment
CC-32	94	City of Clearwater	Outfall location
CC-33	94	City of Clearwater	Degree of initial dilution
CC-34	94	City of Clearwater	Coliform concentrations
CC-35	94	City of Clearwater	Fundable alternative definition
CC-36	94	City of Clearwater	Long-term reliable disposal option
CC-37	94	City of Clearwater	Support of Gulf outfall as a reliable alternative
CC-38	94	City of Clearwater	Commitment to reuse with Gulf outfall alternative
CC-39	94	City of Clearwater	Growth controlling factors
CC-40	94	City of Clearwater	Gulf outfall effluent quality
CC-41	94	City of Clearwater	Gulf outfall effluent quality
CC-42	95	City of Clearwater	Environmental sensitivity of Gulf outfall route
CC-43	95	City of Clearwater	Tampa Bay water quality
NMFS-1	96	National Marine Fisheries Service	Preferred alternatives for wastewater disposal
SFWMD-1	97	Southwest Florida Water Management District	Confining layer definition

TABLE 4 (Cont'd.)

INDEX TO WRITTEN COMMENTS ON NORTH PINELLAS COUNTY DRAFT EIS

Comment Code	Page(s)	Commentor	Nature of Comment
SFWMD-2	97	Southwest Florida Water Management District	Confining layer definition
SFWMD-3	97	Southwest Florida Water Management District	Status of existing injection facilities
SFWMD-4	98	Southwest Florida Water Management District	Update of existing injection facilities
SFWMD-5	98	Southwest Florida Water Management District	Deep well injection monitoring costs
USPHS-1	99	United States Public Health Service	Lack of wasteload allocations
USPHS-2	99	United States Public Health Service	Environmental and public health impacts
USPHS-3	99	United States Public Health Service	Potential for adverse environmental and public health impacts
USPHS-4	100	United States Public Health Service	Require studies and data to determine impacts
SOLID-1	101	Save Our Lakes Invite Discussion	Oppose Gulf outfall
SOLID-2	101	Save Our Lakes Invite Discussion	Support reuse
SGSC-1	102	Suncoast Girl Scout Council	Oppose Gulf outfall
SGSC-2	102	Suncoast Girl Scout Council	Oppose Gulf outfall as a wet weather disposal alternative
SGSC-3	102	Suncoast Girl Scout Council	Support percolation ponds
SGSC-4	103	Suncoast Girl Scout Council	Oppose Gulf outfall as a wet weather disposal alternative
NOAA-1	105	National Oceanic and Atmospheric Administration	Movement of geodetic control survey monuments

TABLE 4 (Cont'd.)

INDEX TO WRITTEN COMMENTS ON NORTH PINELLAS COUNTY DRAFT EIS

Comment Code	Page(s)	Commentor	Nature of Comment
CO-1	106	City of Oldsmar	Population projections
CO-2	107	City of Oldsmar	Grants to correct existing problems
CO-3	107	City of Oldsmar	Wasteload allocation process
DOI-1	109	Department of the Interior	Mineral resource impacts
DOI-2	109	Department of the Interior	Support elimination of discharges into estuaries
DOI-3	109	Department of the Interior	Support reuse
DOI-4	109	Department of the Interior	Support deep-well injection and spray irrigation
DOI-5	109	Department of the Interior	Groundwater export impacts
DOI-6	109	Department of the Interior	Deep-well injection monitoring
DOH-1	111	Department of Housing and Urban Development	Wasteload allocation process
DOH-2	112	Department of Housing and Urban Development	Water conservation
DOH-3	112	Department of Housing and Urban Development	Water conservation
DOH-4	112	Department of Housing and Urban Development	Water conservation
DNR-1	118	Department of Natural Resources	EIS emphasis
DNR-2	118	Department of Natural Resources	Agency coordination

TABLE 5
SUMMARY OF GENERAL TOPICS COVERED BY WRITTEN COMMENTS

TOPICS COVERED	SOURCE OF COMMENTS														
	DEPARTMENT OF ENVIRONMENTAL RESOURCES	TAMPA BAY REGIONAL PLANNING COUNCIL	PINELLAS COUNTY SEWER DEPARTMENT	CITY OF DUNEDIN	CITY OF CLEARWATER	NATIONAL MARINE FISHERIES SERVICE	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT	UNITED STATES PUBLIC HEALTH SERVICE	SAVE OUR LAKE INVITE DISCUSSION	SUNCOAST GIRL SCOUT COUNCIL	NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	CITY OF OLDSMAR	DEPARTMENT OF THE INTERIOR	DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT	DEPARTMENT OF NATURAL RESOURCES
REUSE	1	8		2	38				2				3		
TBRPC POLICY		1													
DISPOSAL ALTERNATIVES REVIEW		2.3.4.5.6.7									1		2		
PUBLIC PARTICIPATION		9													
EIS PURPOSES			1.2												
EIS RECOMMENDATIONS			3.6		1	1									
INTERMITTENT WET WEATHER DISCHARGE			4		12.17										
WASTE WATER TREATMENT PLANT			5		18.19										
ALTERNATIVES CONSIDERED				1	11.21.22					3					
EIS EMPHASIS					2										1.2
WASTE LOAD ALLOCATIONS					3.9.13.20	1						3		1	
EIS COMPLETION					4										
PRIVATE TREATMENT PLANTS					5.6										
LAND APPLICATION					7.16.27								4		
FINANCIAL IMPACTS					8.24										
SAFETY HARBOR TREATMENT PLANT					10.14.28										
OUTDATED DATA					15.29.30										
OUTDATED COSTS					23.25										
GULF OUTFALL IMPACTS					26.31.33.34.39.40.41.42			2.3.4							
GULF OUTFALL ALTERNATIVE					32.36				1	1.2.4					
ALTERNATIVE FUNDING					35.37										
TAMPA BAY WATER QUALITY					43										
DEEP WELL INJECTION							1.2.3.4.5						4.5.6		
POPULATION PROJECTIONS												1			
EPA GRANTS												2			
MINERAL RESOURCE IMPACTS													1		
WATER CONSERVATION														2.3.4	

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

May 7, 1985

ENVIRONMENTAL ASSESSMENT BRANCH
MAY 13 1985
EPA-REGION IV
ATLANTA, GA

Mr. Ronald J. Mikulak
Project Officer
Environmental Assessment Branch
U. S. Environmental Protection
Agency, Region IV
345 Courtland Street N.E.
Atlanta, Georgia 30365

RE: EIS-North Pinellas County Wastewater Facilities

Dear Mr. Mikulak:

Because of the lack of approved wasteload allocations for the majority of Pinellas County's surface waters, the EIS necessarily recommends: (1) no federal action, (2) a Gulf outfall, or (3) a wastewater reuse program.

DER-1 The reuse option responds potentially to the area's surface water quality problems, while addressing ground water supply limitations at a time of increasing disputes over inter-county water transfers and water rights. Of the three options, wastewater reuse (3) appears to be the most appropriate.

Sincerely,

Rodney S. DeHan, Ph.D.
Administrator
Groundwater Section

RSD/dke

Protecting Florida and Your Quality of Life

DER-1. Comment noted.

tampa bay regional planning council

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Commissioner Charles Roberts

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ASSESSMENT BRANCH
RECEIVED
JUN 1985
EPA-REGION IV
ATLANTA, GA.

June 3, 1985

Mr. Ronald J. Mikulak, Project Officer
Environmental Assessment Branch
U.S. EPA - Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Subject: IC&R #97-85; Draft EIS North Pinellas Wastewater
Facilities, Pinellas County

Dear Mr. Mikulak:

The enclosed agenda item regarding the above referenced matter was considered and approved by the Clearinghouse Review Committee of the Tampa Bay Regional Planning Council at its May 28, 1985 meeting.

Please contact the Council staff if further information regarding this item is desired.

Sincerely,

Sheila Benz
DRI Coordinator

SB/lk

Enclosure

cc: Ron Fahs

TC&R #97-85; Draft Environmental Impact Statement, North Pinellas Wastewater Facility, Northern Pinellas County

CLEARINGHOUSE REVIEW

The U.S. Environmental Protection Agency has requested review and comment on a draft of an Environmental Impact Statement (EIS) addressing proposed alternatives for wastewater treatment facilities in North Pinellas County. The study area includes Clearwater, Oldsmar, Dunedin, Tarpon Springs and unincorporated area. Location: North Pinellas County; Agency: U.S. Environmental Protection Agency.

Local Comments Requested From:

Pinellas County Department of Public Works: Correspondence received May 20, 1985. Letter attached.

City of Dunedin Planning and Community Services Department: Correspondence received May 17, 1985. Letter attached.

City of Oldsmar Public Works Department: No comments received as of May 28, 1985.

City of Tarpon Springs Planning Department: No comments received as of May 28, 1985.

Pinellas County Planning Department: No comments received as of May 28, 1985.

Pinellas County Environmental Management: No comments received as of May 28, 1985.

City of Clearwater Planning Department: No comments received as of May 28, 1985.

Council Comments and Recommendations:

TBRPC-1 This project has been reviewed for consistency with the Council's adopted growth policy, the Future of the Region. The proposal has been found to be consistent with Council policy to encourage the protection of ground water recharge areas, wetlands and flood plains while encouraging a continuing supply of good potable water for the entire Tampa Bay Region.

TBRPC-1. Comment noted.

This draft Environmental Impact Statement (EIS) is designed to address the wastewater effluent alternatives for the Northern Pinellas County 201 Study area. Six basic wastewater disposal alternatives were evaluated for the existing municipal facilities:

- Discharge to coastal waters (Old Tampa Bay, Clearwater Harbor-St. Joseph Sound or the Anclote River):

TBRPC-2 This municipal wastewater disposal option to discharge into coastal waters is currently being practiced in many areas. The EIS draft recognizes the detrimental effects that the wastewater effluent has on the coastal environment. Council policy supports all measures to minimize discharge into coastal water that may jeopardize this natural resource. (Future of the Region, 2.701, 2.702, 3.101, 3.012, and 3.6.) The draft lists this alternative as the least expensive option, considering that effluent discharge is currently taking place in the majority of municipal treatment plants.

TBRPC-2. Comment noted.

- A Gulf outfall extending from Clearwater Beach Island, Honeymoon Island or the mainland north of Honeymoon Island:

TBRPC-3 Extensive research and development on the Gulf outfall as a wastewater discharge option was accomplished in detail. The installation of a 60-inch discharge pipe 4 miles Northwestward of Honeymoon Island is extremely expensive, has a high environmental impact potential, and can be a public health hazard. The Gulf outfall alternative does not conform with Council policies with regard to the coastal zone, and preservation of Class II waters, marine grass beds, and Gulf and estuarine beaches. (Future of the Region, 2.701 and 3.601).

TBRPC-3. Comment noted.

- Deep well injection at the Marshall St. Plant or south of the Study Area possibly at the County's McKay Creek Wastewater Treatment Plan and injection site:

TBRPC-4 Deep well injection has been tried on an experimental basis and results are outlined in the EIS draft. This option is expensive but can be utilized as a short term solution to the wastewater effluent problem. It is likely that pumping pressure will need to increase over time as wastewater is pumped between two subsurface confining layers. This is an environmentally suitable option as a back-up method especially during wet weather when other disposal methods are not feasible.

TBRPC-4. Comment noted.

- Slow rate (spray irrigation) or rapid rate (rapid infiltration) land application:

TBRPC-5 Slow rate (spray irrigation) or rapid rate (rapid infiltration) land application as a means of effluent disposal is dependent upon acreage and soil characteristics. Suitable land is necessary to accept the volume of effluent without ponding runoff from the site or the contamination from the effluent itself. Secondary municipal effluents contain concentrations of nutrients that are beneficial to plant growth and it enriches the soil. Spray irrigation using effluent ideally recharges the aquifer and removes some burden from the aquifer as a potable water source. This option is not feasible, however, in wetlands or areas with poor drainage, or during wet climate conditions, and is not recommended for the 201 study area.

TBRPC-5. Comment noted.

- Wastewater reuse of nonpotable wastewater for irrigating recreational or other open land areas and industial cooling and service water:

Wastewater reuse is the only management option that responds to Pinellas County's surface water quality problems while considering water supply limitations. This environmentally preferred method of wastewater effluent disposal is outlined in the EIS for the Northern County area specifically for parks and golf courses. Reuse was not considered for individual homes, businesses and subdivisions due to "preliminary cost and available land estimates". City of St. Petersburg individual property owners already have access to treated wastewater if the owner pays a hook-up fee. With 25 percent of the land in Northern Pinellas County used as residential, serious consideration should be given to broadening the availability of wastewater effluent reuse. Potential benefits from wastewater reuse include: TBRPC-6

1. Water is reused for irrigation, including during drought conditions;
2. Water supply and aquifer demands are reduced;
3. Wastewater discharge to nearshore coastal waters are reduced;
4. Potential recharge of the aquifer; and
5. Wastewater effluent contains nutrients beneficial to plant growth and as a soil additive.

TBRPC-7 It is recommended that future wastewater effluent alternative evaluations explore the potential for commercial and private water reuse programs. Council policy section 3.103 states that wastewater renovation and non-potable reuse programs should be implemented where practical.

Comments from Pinellas County indicate that the specific recommendations for each sub-area were based solely on Federal fundability and that there were no recommendations for the East Lake Tarpon sub-area other than limiting development. Further the attached letter states that no consideration was given to the need for wet weather discharges. The EPA's policy and regulations do not allow funding for development in the environmentally sensitive areas east of Lake Tarpon. Construction grants will not provide funding for future wastewater facilities in this area. Development in this area will be dependent upon small wastewater package plants which have a record for poor treatment, untrained staff, and little environmental monitoring on effluents.

TBRPC-8 The Council encourages EPA to find a viable solution to wastewater effluent east of Lake Tarpon area. In addition, based on the above, it is recommended that the alternative of wastewater reuse, with deep well injection as a back-up method in wet conditions, ultimately be approved.
TBRPC-9 Further, it is recommended that any additional comments addressing local concerns be considered prior to approval.

Committee adopted May 28, 1985.

Tom Vann Acting Chairman
Westwood H. Fletcher, Jr., Chairman
Clearinghouse Review Committee

Please note: Unless otherwise notified, action by the Clearinghouse Review Committee is final. Please append a copy to your application to indicate compliance with clearinghouse requirements. The committee's comments constitute compliance with Florida's Intergovernmental Coordination and Review process only.

TBRPC-6. Comment noted.

TBRPC-7. Comment noted.

TBRPC-8. The No Federal Action alternative has been identified as the EIS selected wastewater management alternative for the area east of Lake Tarpon. Future planning and development decisions in this area are the responsibility of local governing bodies. Reuse comment noted.

TBRPC-9. All comments received before July 26, 1985 are considered.

BOARD OF COUNTY COMMISSIONERS

PINELLAS COUNTY SEWER SYSTEM
310 COURT STREET
CLEARWATER, FLORIDA 33516

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May 20, 1985

Ms. Ellen C. Cohen
IC&R Coordinator
Tampa Bay Regional Planning Council
9455 Koger Boulevard, Suite 219
St. Petersburg, Florida 33702

Re: IC&R #97-85
Draft EIS, North Pinellas County

Dear Ms. Cohen:

PCSS-1 The original purpose of this Environmental Impact Statement was to confirm the preferred alternatives for effluent disposal in the North Pinellas County 201 Study Area. The factors to be considered were cost, environmental impacts, operability considerations and implementability factors. The study area was divided into a number of sub-areas. These sub-areas were chosen such that the recommendations for effluent disposal could be generalized for that sub-area.

PCSS-2 It appears that the purpose of the EIS was not completely fulfilled since the specific recommendations for each sub-area were based solely on Federal
PCSS-3 fundability. In addition, we are disappointed that there was no recommendations for the East Lake Tarpon sub-area other than limiting development, and
PCSS-4 that no consideration was given to the need for wet weather discharges.

PCSS-5 It should also be pointed out that the package treatment plants in the East Lake Tarpon sub-area are county owned and operated and not privately owned as stated in the report.

PCSS-6 It is unfortunate that the EIS offers no relief with respect to identifying an environmentally preferred effluent disposal option that is suitable for year round use. Pinellas County and the municipalities who operate wastewater treatment facilities will suffer as a result of the failure of EPA to fulfill the purpose and intent of the EIS.

Sincerely yours,

Todd L. Tanberg

Todd L. Tanberg, P.E.
Director ~~of Sewer System~~

TLT:mk

PINELLAS COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER

PCSS-1. The purpose of the EIS is not to confirm the 201 Plan recommendations but rather to develop and evaluate wastewater management alternatives leading to the selection of the most cost effective environmentally sound alternative.

PCSS-2. An important element in selecting an EIS preferred alternative is implementability. Funding sources and eligibility for EPA funding are key factors in determining implementability.

PCSS-3. The No Federal Action alternative has been identified as the EIS selected wastewater management alternative for the area east of Lake Tarpon. Future planning and development decisions in this area are the responsibility of local governing bodies.

PCSS-4. The selection of wet weather discharges cannot occur until approved wasteload allocations are available.

PCSS-5. The EIS will be revised to show County ownership.

PCSS-6. Potential reuse back-ups have been identified as deep well injection, intermittent surface water discharges or Gulf outfall. Additional investigations and information including approved wasteload allocations are needed before an appropriate back-up can be selected.

MEMORANDUM

TO: Rosemarie Fallon, Div. Director, Planning

FROM: John Herrick, City Engineer

DATE: May 13, 1985

SUBJECT: Environmental Impact Statement Draft EIS
North Pinellas County Wastewater Facilities

The subject document discusses three wastewater disposal alternatives for the City of Dunedin. This is to advise that we concur with two of these alternatives as follows:

CD-1

1. Continue existing discharge to St. Joseph Sound, and
2. Distribution of reusable wastewater to parks, golf courses and other lands for nonpotable uses.

The third alternative of a gulf outfall would be a viable alternative if Federal Funding was provided.

CD-2 The recommendation of reuse plus secondary treatment and filtration is preferred by the City of Dunedin.

John Herrick

JH/LBA/jr

CD-1. Comment noted.

CD-2. Comment noted.

CITY OF CLEARWATER

POST OFFICE BOX 4748
CLEARWATER, FLORIDA 33518 – 4748

City Manager

June 4, 1985

JUN 1 3 1985
[illegible] REGION IV
ATLANTA, GA.

Mr. Robert B. Howard, Chief
NEPA Compliance Section
Environmental Protection Agency - Region IV
345 Courtland St. N.E.
Atlanta, Georgia 30365

RE: North Pinellas County, Florida
Draft Environmental Impact Statement (EIS)
Review Comments

Dear Mr. Howard:

Following is a list of review comments for the North Pinellas County Draft Environmental Impact Statement. We certainly appreciate this opportunity to respond.

-1 Prior to expressing the enumerated enclosed considerations I want to specifically emphasize that the City of Clearwater's principal difficulty with the Draft EIS is that, contrary to what we clearly believed to be a primary objective of the report, no indication is offered as to what direction Clearwater might possibly pursue with any degree of anticipated regulatory approval relative to the permitting and funding of a permanent effluent disposal method.

-2 Clearwater originally requested inclusion in the EIS study specifically for the determination of a viable effluent disposal method and made request to EPA that particular emphasis be given in the EIS study to the Gulf Outfall disposal method.

The Draft EIS clearly states that insufficient acreage is available for total effluent land disposal and that EPA has previously rejected deepwell injection for Clearwater. The remaining disposal options are only Gulf Outfall and local surface water discharge. Of these two options, EPA is threatening legal action against Clearwater for non-compliance of "zero discharge" determination to local surface waters and EPA gives no indication that approval or funding could ever be obtained for the Gulf Outfall.

-3 Clearwater, therefore, finds itself in a dilemma which the Draft EIS makes no mention of. We strongly urge, therefore, that the EPA coordinate and fund the Florida Dept. of Environmental Regulation Wasteload Allocation Study now being prepared for local surface waters, and which is required by the EIS report.

-4 We further request that approval of the Final EIS report await the results of the above wasteload allocation study and that these results be included in the Final EIS. This information should provide a firm basis for the EPA to make final recommendation in the EIS for a workable effluent disposal method for the City of Clearwater's sewage treatment plants. Anything short of a logical conclusion of the EIS will render the study's large cost and many years of study totally useless.

(continued)

"Equal Employment and Affirmative Action Employer"

CC-1. A wastewater management alternative can not be selected until approved wasteload allocations are available for Old Tampa Bay and Clearwater Harbor - St. Joseph Sound.

CC-2. A Gulf outfall alternative was considered equally with other effluent disposal alternatives.

CC-3. Wasteload allocation studies which are the responsibility of the State of Florida are currently underway.

CC-4. Since conclusions can be made for several subareas within the EIS Study Area, a Final EIS will be published. Once approved wasteload allocations are available for Old Tampa Bay and Clearwater Harbor - St. Joseph Sound, conclusions can be made for the remaining subareas. If needed, an EIS supplement incorporating the wasteload allocation results will be prepared.

Mr. Robert B. Howard, Chief
NEPA Compliance Section
EPA Agency - Region IV, Atlanta, Georgia
June 4, 1985
Page - 2 (continued)

Further specific comments follow:

CC-5 1. No mention is made in this report of the numerous private treatment
facilities throughout Pinellas County which serve condominiums, mobile
home parks and subdivisions. Some of these treatment facilities are
large, for example: Curlew City, Top-of-the-World Condominium and
Dynaflo. No provisions are stated for their future operation. As is
common with these type of facilities, their effluent outfall is invariably
to the nearest drainage channel such as the Dynaflo outfall to Curlew
CC-6 Creek. Actions and recommendations contained in this report should
address private facilties as well.

CC-7 2. Figure ii shows NEPCF irrigating Top-of-the-World golf course. This is already being done by the Top-of-the-World treatment facility.

CC-8 3. No provision is made for the costs of future development capacity being assessed to future system users by connection/impact fees. This method will greatly lower the existing user charges in Table 5 with or without the availability of federal funding.

CC-9 4. During the late 1970's, Clearwater was repeatedly told that the EIS would identify the appropriate method for discharge of the City's effluent. This goal has still not been achieved, presumably because wasteload allocations for Pinellas County surface waters have not yet been developed and approved. We feel that the six years since the EIS was initiated should have been more than sufficient for EPA and DER to have coordinated and accomplished this plus any other task essential to satisfactory completion of the EIS.

CC-10 5. On page vi, Safety Harbor is incorrectly identified as having a direct discharge, when in fact, their raw wastewater is processed at the Clearwater Northeast plant.

CC-11 6. Table iii on page xvii presents data on management alternatives for the area east of Lake Tarpon, but does not include treatment of flows from that area at the Clearwater Northeast plant (which is the method finally recommended in the North Pinellas 201 Plan).

7. On page xx, wastewater reuse (for irrigation and other non-potable
purposes) is cited as the preferred disposal alternative. That discussion
includes the statement that "the need for a wet weather backup for waste-
CC-12 water that cannot be reused is likely to exist". In our opinion, this
statement should be strengthened considerably by saying that the need for
a backup disposal method is essential. (Very small facilities or other
unique situations may be an exception). A similar statement is made in
the next to last paragraph of page 92.

(continued)

CC-5. An inventory of private treatment facilities was presented in the Inventory Task Report.

CC-6. The focus of the EIS was the development and evaluation of wastewater disposal alternatives for municipal facilities in the Study Area. The disposition of the small private facilities (i.e. hook-up to the municipal facilities or continued discharge) is a local decision to be addressed through local wastewater management planning.

CC-7. The site was indicated as a possible site. This listing did not imply that the Owner agreed to accept wastewater effluent from the Clearwater Northeast wastewater treatment plant.

CC-8. The local government would be responsible for setting connection/impact fees.

CC-9. A wastewater management alternative can not be selected until approved wasteload allocations are available for Clearwater Harbor St. Joseph Sound and Tampa Bay. The responsibility for developing wasteload allocations is with Florida DER. EPA does have review and approval authority.

CC-10. Page vi will be revised to state that the City of Safety Harbor is served by the Clearwater Northeast wastewater treatment plant.

CC-11. After the completion of the 201 Plan, Pinellas County and the City of Oldsmar agreed upon the area of east of Lake Tarpon which will be served by Oldsmar. If the remaining area east of Lake Tarpon is served by an existing treatment plant, either Tarpon Springs or Oldsmar would be selected because of the shorter transmission distance and associated costs.

CC-12. Comment noted.

8. The last paragraph of page 7 provides a brief statement of the complex regulatory situation involving Pinellas County surface waters. Effluent discharge to some of these waters is restricted by no less than three separate laws or rules as follows:

- a "no-discharge" wasteload allocation issued by DER in 1978.
- a designation of Outstanding Florida Waters (OFW) which has been illogically set to coincide with a county boundary line.
- a classification of Class II waters for shellfish harvesting and propagation.

CC-13 Despite the existence of these regulations, DER is currently conducting new wasteload allocation studies. The City of Clearwater agrees with this approach, and firmly believes that decisions on effluent discharges must be made strictly on the merits of water quality and other technical factors, and not on the basis of arbitrarily established regulations.

CC-14 9. The second wastewater management finding on page 10 should state that the City of Safety Harbor is already being served by the Clearwater Northeast plant.

CC-15 10. The last three management findings on page 11 are ancient history and of no importance to today's situation.

CC-16 11. The table of land irrigation system characteristics on page 14 implies that underdrains are not needed for either slow or rapid rate systems. At the application rates cited, and with the soils and groundwater table conditions that typically prevail in Northern Pinellas County, underdrains would be required more often than not.

CC-17 12. The first paragraph of page 15 provides an unqualified statement that a backup method of disposal is necessary because of wet weather limitations on land disposal. While this has always been a fact, both EPA and DER have been reluctant to admit it in the past. It is noteworthy that a more realistic view has now been taken.

CC-18 13. On page 15, the McKay Creek plant is incorrectly identified as being in Largo.

CC-19 14. On page 16, effluent from the Albert Whitted plant is incorrectly indicated as being transferred to McKay Creek.

CC-20 15. On page 16, we do not understand the statement about "the system operating 50 percent of the available time", as a part of the description of the difference between land application and water reuse. Clarification would be appreciated.

(continued)

CC-13. Comment noted.

CC-14. Page 10 will be revised to state that the City of Safety Harbor is served by the Clearwater Northeast plant.

CC-15. Comment noted.

CC-16. Additional site specific studies would be required before implementation.

CC-17. Comment noted.

CC-18. Page 15 will be revised to reflect unincorporated area of North Pinellas County.

CC-19. Page 16 will be revised to reflect the Albert Whitted plant is proposing two 30-inch diameter injection wells for effluent disposal.

CC-20. The land would be idle 50 percent of the time.

Mr. Robert B. Howard, Chief
NEPA Compliance Section
EPA Agency - Region IV, Atlanta, Georgia
June 4, 1985
Page - 4 (continued)

CC-21 16. In Table 1 starting on page 20, there is no explanation of the many missing numerical designations of disposal alternatives, or why these alternatives were eliminated from further consideration.

CC-22 17. On page 25, clarification is needed with regard to the statement that "Sewers from the area east of Lake Tarpon connected to any treatment plant other than either the Oldsmar or the Tarpon Springs WWTP would be costly or result in operational concerns". This and following statements are contrary to a conclusion of the 201 Plan (which suggests treatment at Clearwater Northeast) without explaining why.

CC-23 18. On page 26 and 27, it is stated that the cost figures are based on 1980 values and that facility construction is/was assumed to take place in 1984. These costs are outdated.

CC-24 19. In Table 5 on page 34, it is unclear why the user charge estimates are so much higher for Northeast than for the other two Clearwater plants.

CC-25 20. It is suggested that Table 5 contain a statement to the effect that the costs are outdated.

CC-26 21. Page 36 contains a statement about a Gulf outfall which expresses the concern of "questionable acceptance by the public or any regulatory agency, in light of the uncertain likelihood that discharged effluent would adversely affect barrier island beaches". The statement is both ambiguous and unnecessarily inflammatory. In addition, it contradicts many other comments in the report which conclude that the effluent would not be expected to reach the beaches, and that pollutant concentrations would probably be indistinguishable from background levels even if it did.

CC-27 22. Table 6 and Figure 1 indicate that the Clearwater East WWTP could or should supply effluent for irrigation to the Cove Cay Golf Club and the St. Petersburg/Clearwater Airport. Both of these properties are located well to the south of Clearwater within the service area of the City of Largo. While Cove Cay is about equidistant from the two treatment plants, the airport is immediately east of the Largo facility and just north of other properties already receiving their effluent. In any event, the airport has already indicated that they do not wish to utilize effluent for this purpose.

CC-28 23. On page 44, reference is made to the discharge from the Safety Harbor plant which has been abandoned for several years.

CC-29 24. On page 54, statistics on commercial fishing are cited from 1976. Since this is of no pertinence today, the figures should be updated or deleted.

CC-30 25. The economics and employment statistics quoted on page 59 are too old (1977 to 1980) to be of any interest at this time.

(continued)

CC-21. The number designations were presented in the Alternatives Development Task Report. The reasons for eliminating certain alternatives from further consideration were presented in the Alternatives Development and Evaluation Task Reports.

CC-22. After the completion of the 201 Plan, Pinellas County and Oldsmar agreed upon the area east of Lake Tarpon which will be served by Oldsmar. If the remaining area of Lake Tarpon is served by an existing treatment plant, either Tarpon Springs or Oldsmar would be selected because of the shorter transmission distance and associated costs.

CC-23. Although the cost figures are based on 1980 values and assume 1984 construction, the costing was not updated. For cost comparison purposes, it was not necessary nor cost effective to update costs at this time. Once wastewater management systems are determined, costs and construction timing will be updated.

CC-24. The user charges are based on existing users. As the number of users grow, the user charge for the Northeast plant will drop considerably.

CC-25. A footnote will be added indicating costs are 4th quarter 1980 costs.

CC-26. The purpose of the statement is to recognize that some members of the public and regulatory agencies may believe the discharging effluent could possibly impact the beaches.

CC-27. The two sites are indicated as possible sites. This listing did not imply that they agreed to accept wastewater effluent from Clearwater East or other wastewater treatment plants.

CC-28. Safety Harbor wastewater is now treated at the Clearwater Northeast wastewater plant.

CC-29. These figures were provided to recognize the general magnitude of the activity. It was decided not to update such information since it would not impact the process used to select a fundable wastewater management system.

CC-30. These figures were provided to recognize the general magnitude of the activity. It was decided not to update such information since it would not impact the process used to select a fundable wastewater management system.

C-31 26. Table 11 on page 76 includes this statement about Gulf outfalls. "As a wastewater plume would rise, dilution would allow water quality criteria for all wastewater constituents except phosphorus to be met within 50 feet of an outfall." It should be noted that if phosphorus is of real concern, that levels in the effluent could be readily reduced prior to discharge.

C-32 C-33 27. On page 78 and 79, information on the predicted dilution of effluents from a Gulf outfall is provided. However, this analysis is apparently based on discharge into 15 feet of water, whereas about 30 feet of water actually exists at the locations which might be considered for discharge. The use of 30 rather than 15 feet would result in a considerably higher degree of initial dilution.

C-34 28. In footnote (1) of Table 12, the cited concentrations of total and fecal coliforms are much higher than should be considered typical of properly disinfected secondary effluents.

C-35 29. On page 93, the term "fundable" alternative needs to be defined.

C-36 C-37 30. Page 96 states that a Gulf outfall would provide the area with a reliable long-term disposal option. We feel that reliable long-term disposal of some sort is absolutely essential to the area, that land application schemes do not fulfill that need, and that injection wells may not either. Therefore, if outfall discharges to near-shore waters such as Old Tampa Bay, St. Joseph Sound and Clearwater Harbor are prohibited, a Gulf outfall would be the only alternative capable of providing that necessity.

C-38 31. Page 96 also states that an investment in a Gulf outfall would tend to discourage effluent reuse. We do not necessarily agree and feel that a committment to effluent reuse could be worked out during the various permitting processes.

C-39 32. Page 96 also states that a Gulf outfall could promote higher density development, and development in environmentally sensitive areas which are not suitable for on-lot or recycle wastewater management. We feel that growth should be (and usually is) managed by zoning, land use and other factors which have nothing to do with wastewater handling.

C-40 C-41 33. Page 96 also states that use of a Gulf outfall would require secondary treatment and disinfection of wastewater to minimize adverse impacts on local beaches. Since this level of treatment is required for any discharge, we do not understand the point being made here. In any event, we feel that the secondary effluent should also be filtered prior to use of a Gulf outfall as an added safety factor.

(continued)

CC-31. Additional treatment could be included to remove phosphorous or other wastewater constituents. This additional treatment would result in additional costs.

CC-32. Fifteen feet was selected to demonstrate the results of mathematical simulations to determine probable dilution rates.

CC-33. The use of 30 feet would likely result in a higher degree of initial dilution.

CC-34. Comment noted.

CC-35. The fundable alternative is the most cost effective, environmentally sound disposal alternative that would be eligible to receive EPA construction grant funds.

CC-36. Comment noted.

CC-37. Comment noted.

CC-38. There would be little incentive to invest in a major reuse alternative if investment was made in a Gulf outfall alternative.

CC-39. EPA agrees that zoning, land use and other similar activities are local governing bodies responsibilities, however, the availability of wastewater handling can certainly remove a development constraint.

CC-40. The purpose is to define the level of treatment.

CC-41. Filtration has been considered and could possibly be provided if a Gulf outfall is recommended once approved wasteload allocations are available.

Mr. Robert B. Howard, Chief
NEPA Compliance Section
EPA Agency - Region IV, Atlanta, Georgia
June 4, 1985
Page - 6 (continued)

CC-42 34. Although the EIS states that Gulf outfall station 3F (4 miles west of Honeymoon Island) was found to be less environmentally sensitive than sites closer to shore, we could not locate clearcut supporting evidence for this conclusion either in the EIS or in the reports on sampling and dye movement prepared by Mote Marine Laboratory.

CC-43 35. The next to last paragraph on page 43 relative to the average dissolved oxygen of "more than 7.0 mgl" in Old Tampa Bay is somewhat misleading inasmuch as bottom samples in that same area may be near zero.

We appreciate the opportunity to respond to the report and hope that you will closely examine our position in this most important matter.

Very truly yours,

Anthony L. Shoemaker
City Manager

copies: E. S. Haeseker, Asst. City Manager
F. J. Janocha, Water Pollution Control
William C. Baker, Director of Public Works
John Dennis, Briley, Wild and Assoc.

CC-42. The statement was made based on bottom habitat, the presence of hard bottoms and current data which were presented in the Marine Sampling Program reports.

CC-43. The statement was not written to mean that all samples show dissolved oxygen values of more than 7.0 mgl.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
9450 Koger Boulevard
St. Petersburg, FL 33702

June 7, 1985

F/SER113/WMT
904-234-5061

Mr. Jack Ravan
U.S. EPA - Region IV
345 Courtland St., N.E.
Atlanta, Ga. 30365

Dear Mr. Ravan:

The National Marine Fisheries Service has reviewed the Draft Environmental Impact Statement for North Pinellas County, Florida regarding the proposed wastewater management facilities for northern Pinellas County, Florida.

NMFS-1 Our preferred alternatives for disposal of treated wastewater are: deep well injection, land application and water reuse, and on-lot systems with assurances of proper installation and operation. Outfall(s) to the Gulf of Mexico would be acceptable providing the effluent is adequately treated to avoid any degradation of the receiving waterbody.

We appreciate the opportunity to provide these comments. If you have any questions, please contact Mr. Mark Thompson of our Panama City, Florida Area Office at 904-234-5061.

Sincerely yours,

for Edwin J Keppner
Richard J. Hoogland
Chief, Environmental Assessment Branch

JUN . 0 1985
EPA-R.
ATLANT

NMFS-1. Comments noted.

SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
2379 BROAD STREET, BROOKSVILLE, FLORIDA 33512-9712
PHONE (904) 796-7211 SUNCOM 684-0111

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JAMES M. HARVEY, *Deputy Executive Director*

June 11, 1985

Mr. Robert B. Howard, Chief
NEPA Compliance Section
Environmental Protection Agency, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

SUBJECT: Draft Environmental Impact Statement;
North Pinellas County, Florida Wastewater Facilities

Dear Mr. Howard:

The staff of the Southwest Florida Water Management District (SWFWMD) has reviewed the above referenced Draft Environmental Impact Statement (DEIS) for North Pinellas County, Florida Wastewater Facilities. Based on this review, the following comments are submitted at this time:

1. In reference to the deep-well injection alternative, several points need clarification. First, on page 82 (paragraph 8) of the DEIS the applicant states, "approximately 480 years would be required to push the wastewater through 50 feet of an unfractured confining layer, assuming the vertical hydraulic conductivity of the confining layer is 10 E-7 cm/sec (which is typical for claylike formations)." In actuality, the vertical hydraulic conductivity for the confining layers overlying the injection zones at sites in Pinellas County, range from 4.5 E-7 cm/sec to 9.2 -4 cm/sec. These values are obtained from core samples representing silts and sandy
SFWMD-1 silts, not claylike formations. With this in mind, the travel time of 480 years to reach a potable water supply may be overestimated. Another point to consider is
SFWMD-2 that the lithologic sequence thins toward the north, with a thinner confining bed potentially altering the travel times.

2. Besides the hydrogeologic uncertainties for sites which have proposed injection systems, several permitted injection facilities are experiencing leakage of treated
SFWMD-3 effluent to overlying aquifers.

   Page 15 (paragraph 5) states, "Currently, the status of deep wells in Southern Pinellas County are as follows: (1) wells at the St. Petersburg Southwest WWTP are approved and operating. (2) wells at McKay (Largo) South Cross Bayou, and St. Petersburg Northeast WWTPs are being tested, based on the Florida DER long-term testing requirements, (3) wells at the St. Petersburg Northwest WWTP are now being installed, and (4) wells at the Albert Whitted WWTP will not be utilized; effluent from the WWTP will be transferred to McKay Creek."

   St. Petersburg Southwest WWTP has an operating permit but due to either possible

SFWMD-1. Comment noted.

SFWMD-2. Comment noted.

SFWMD-3 Comment noted.

SFWMD-4 well construction problems or inadequate confinement, effluent is leaking to the overlying aquifer. McKay Creek and South Cross Bayou are inoperative at present and testing is scheduled to determine if these facilites are leaking. In addition, the Albert Whitted WWTP is proposing to construct two 30 inch diameter injection wells for the purpose of effluent disposal.

SWFMD-4. Page 15 will be updated to reflect current information.

3. Tables 2 and 3 (pages 30, 31) illustrate the present worth cost summary for the Old Tampa Bay Sub-area and the Clearwater Harbor/St. Joseph Sound Sub-area. SFWMD-5 However, due to the extensive monitoring which may be required, both onsite and offsite to monitor any adverse impacts on wellfields and surrounding water resources, by regulatory agencies, these tables may not reflect true total costs.

SWFMD-5. Comment noted.

The staff comments stated above have not been presented to the District Governing Board. This review does not stand in lieu of normal permitting procedures, nor does it necessarily represent the position or opinion of the Governing Board.

Thank you for this opportunity to comment. If I may be of further assistance, please feel free to contact me.

Sincerely,

PHILLIP W. WALDRON
Planner
Planning Section

PWW:pam

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
Atlanta GA 30333

June 14, 1985

JUN

Mr. Robert B. Howard
Chief, NEPA Compliance Section
Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Dear Mr. Howard:

We have reviewed the Draft Environmental Impact Statement (EIS) for Wastewater Facilities, North Pinellas County, Florida. We are responding on behalf of the U.S. Public Health Service and are offering the following comments for your consideration in preparing the Final EIS.

The Draft EIS, as presently written, is a preliminary report which does not present a preferred alternative due to the lack of approved wasteload allocations for most of Pinellas County's surface waters. We agree that prudent wastewater management decisions must wait for the issuance of wasteload allocations and that to recommend an alternative now would risk noncompliance with future regulatory guidelines. Clearly, we also cannot comment on allocation-dependent issues/alternatives until such allocations are established. USPHS-1 Therefore, we must reserve our Agency's comments until we receive the necessary information delineating both the wasteload allocations and the preferred management alternative. We trust this information can be provided soon.

We can comment at this time, however, on the service areas whose wastewater management alternatives are basically independent of wasteload allocations. The environmentally preferred alternative for sewered areas of North Pinellas County has been identified as reuse of wastewater for non-potable applications. There should be minimal environmental or public health impacts resulting from the implementation of this alternative provided that wastewaters are adequately treated (treatment dictated by intended application) prior to reuse. The chosen alternative for the area east of Lake Tarpon is to not provide funding for wastewater facilities in order to discourage development in this environmentally sensitive area. Existing wastewater management methods around Lake Tarpon USPHS-2 include septic tanks with absorption fields and private package plants facilitating land application sites. The decision to "administratively" discourage future development in this sensitive area is commendable; however, improper location and/or mismanagement of individual on-site and small land application processes could result in severe environmental and public health impacts. USPHS-3 Considering that future development east of Lake Tarpon will rely exclusively on such systems, the Final EIS should address the potential for adverse environmental and public health impacts related to continued growth in this area.

USPHS-1. Comment noted.

USPHS-2. Comment noted.

USPHS-3. If wastewater management activities continue in the future as they have in the past, EPA does not expect a potential for environmental and public health impacts which are related to growth.

As suggested by the Draft EIS, the Gulf outfall alternative requires further study. Public health and environmental impacts of this proposal are not easily addressed in general terms, especially because complex water movements make predictions of impacts on Gulf beaches very uncertain. Public health impacts are further complicated by the implications of researchers currently reviewing marine water quality. Recent studies have suggested that wastewater outfalls near marine recreational areas may be associated with significant health risks to bathers. Furthermore, indicator organisms other than the traditional coliforms may be necessary to accurately quantify the degree of exposure. USPHS-4 Therefore, we feel that any comments on the environmental and public health significance of a Gulf outfall would be inappropriate without specific site information (e.g. modeling studies, construction details, background sampling data, etc.).

We appreciate the opportunity to review the Draft EIS and would like to receive a copy of the supplemental information concerning wasteload allocations and the preferred management alternative, as well as a copy of the Final EIS, when these materials become available. If you have any questions regarding our comments, please contact Mr. Bob Williams, P.E., of our staff at 452-4161.

Sincerely yours,

Stephen Margolis, Ph.D.
Chief, Environmental Affairs Group
Center for Environmental Health

USPHS-4. As indicated in the Draft EIS, additional site specific analyses and permit/administrative review and approval would be needed if a Gulf outfall alternative were to receive further consideration.

JUN [illegible] 1985

6 - 15 - 85
S.O.L.I.D.

Mr. Robert B. Howard
Chief
Nepa Compliance Sec.
E.P.A. Region 4
345 Courtland St. N.E.
Atlanta, Ga. 30365

Dear Sir:

SOLID-1 Thank you for the opportunity to be on record that "Save Our Lake Invite Discussion" with 145 paid members are against the outfall to the gulf, for waste water treatment.

SOLID-2 The discussion regarding and the argument for the re-use of water for Pinellas County is an excellent one. It is time Pinellas County is made to live within the realm of consideration for the environment. The scene on Lake Tarpon for three days this month did not get news coverage or was any Pinellas County warning issued for health and welfare concern for the population of the area.

To grant them this outfall request would populate the County even more since there would be no limiting factor.

Best Regards

Margaret G. Fawcett

Margaret G. Fawcett, Sec.
"Save Our Lake Invite Discussion"
1820 Richard Ervin Parkway
Tarpon Springs, Fla. 33589

CC: Governor Bob Graham

Please give Frank Payne a hello from us

SOLID-1. Comment noted.

SOLID-2. Comment noted.

Suncoast
Girl Scout Council, Inc.
3711 Watrous Avenue
Tampa, Florida 33629

June 18, 1985

Ronald J. Mikulak, Project Officer
Environmental Assessment Branch
EPA, Region IV
345 Courtland Street, N.E.
Atlanta, GA 30365

Re: North Pinellas County, Florida, Draft Environmental Impact Statement For Proposed Wastewater Facilities

Dear Mr. Mikulak:

SGSC-1 Suncoast Girl Scout Council, Inc. is strongly opposed to Gulf outfall as a system for effluent disposal, as recommended in the draft of the North Pinellas County Environmental Impact Statement For Proposed Wastewater Facilities. We feel that such a method of effluent disposal is potentially hazardous to the health and welfare of girls and adults using Girl Scout Camp Wai Lani, which is located in Palm Harbor and situated on the Gulf of Mexico.

We realize that spray irrigation is the primary method of
effluent disposal recommended by the 201 Plan and contained in
the draft of the Environmental Impact Statement presented
Tuesday, June 11, 1985 at the Public Hearing at the Pinellas
SGSC-2 County Courthouse, Clearwater, Florida. However, the
recommendation of Gulf outfall as the backup method for effluent
disposal from the North Pinellas County Plant, located just east
of Girl Scout Camp Wai lani, and from the Tarpon Springs Plant,
located to the north of Wai Lani is totally unacceptable to
Suncoast Girl Scout Council, Inc. We urge that you consider
SGSC-3 percolation ponds as a backup method of effluent disposal, as you
have recommended for the Oldsmar Plant, or other methods of
wastewater disposal more beneficial to the environment and more
acceptable to the public.

Telephone Hillsborough (813) 253-0891, Pinellas (813) 442-7104
Serving Hernando, Hillsborough, Pasco and Pinellas Counties
A United Way Agency

SGSC-1. A Gulf outfall alternative was evaluated as a wastewater disposal option as were several other alternatives. The Gulf outfall alternative is not recommended as the environmentally preferred EIS alternative. Costs and environmental statements concerning a Gulf outfall are, however, presented.

SGSC-2. A Gulf outfall to serve as a back-up method for effluent disposal is not recommended in the Draft EIS. The recommended alternative for Tarpon Springs is discharge to the Anclote River.

SGSC-3. Percolation ponds are not recommended as a back-up in the EIS. Potential back-ups for the environmentally preferred alternative of wastewater reuse include deep well injection, intermittent surface water discharge or a Gulf outfall.

Suncoast Girl Scout Council, Inc. has a membership representing approximately 15,000 families in the Tampa Bay area. In the early 1970's, the Council took a position opposing the disposal SGSC-4 of effluent through a Gulf outfall system. We continue to uphold that position. We strongly urge you to reconsider the 201 Plan recommendation that a Gulf outfall system be used as the backup method for effluent disposal from the North Pinellas County and Tarpon Springs Plants and to develop, before the final proposal is published, alternative methods for effluent disposal at these locations.

Yours sincerely,

Patricia H. Allison
Executive Director

djt

SGSC-4. Alternative methods for wastewater disposal have been developed. A Gulf outfall disposal alternative is not recommended for either Tarpon Springs or the North Pinellas County wastewater treatment plants.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Washington, D.C. 20230

OFFICE OF THE ADMINISTRATOR

June 19, 1985

Mr. Robert B. Howard
Chief, NEPA Compliance Section
Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

Dear Mr. Howard:

Enclosed are additional comments from the National Oceanic and Atmospheric Administration for the North Pinella County, Florida Wastewater Project. Comments from the Southeast National Marine Fisheries Region were sent to you earlier.

We hope our comments will assist you.

Sincerely,

David Cottingham

David Cottingham
Ecology and Conservation Division

Enclosure

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL OCEAN SERVICE
Washington, D.C. 20230

June 21, 1985

N/MB2:CMS

TO: PP2 - David Cottingham

FROM: N - Paul M. Wolff

SUBJECT: DEIS 8504.15 - North Pinellas County, Florida, Wastewater Facilities Project

The subject DEIS has been reviewed within the areas of the National Ocean Service's (NOS) responsibility and expertise, and in terms of the impact of the proposed action on NOS activities and projects.

NOAA-1 Geodetic control survey monuments may be located in the proposed project area. If there is any planned activity which will disturb or destroy these monuments, NOS requires not less than 90 days notification in advance of such activity in order to plan for their relocation. NOS recommends that funding for this project includes the cost of any relocation required for NOS monuments. For further information about these monuments, please contact Mr. John Spencer, Chief, National Geodetic Information Branch (N/CG17), or Mr. Charles Novak, Chief, Network Maintenance Section (N/CG162), at 6001 Executive Boulevard, Rockville, Maryland 20852.

NOAA-1. Comment noted.

City of Oldsmar

June 24, 1985

Mr. Ronald J. Mikulak, Project Officer
Environmental Assessment Branch
U.S. EPA - Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Peference: Comments on North Pinellas County
Environmental Impact Statement.

Dear Mr. Mikulak:

The City of Oldsmar has been working diligently for years to develop an environmentally sound plan for wastewater management which would serve the City's needs through the foreseeable future. We have participated to the fullest extent possible in the preparation of the Pinellas County 201 Study and supported the study until its last minute change by certain parties which did not seem to have the best interests of the City of Oldsmar in mind. Although the City has had problems with their present wastewater treatment plant for several years, it has restrained itself in proceeding with necessary modifications to the facility, awaiting the outcome of the Environmental Impact Statement in order that the City did not proceed down the wrong avenue and be forced at a later date to revise or reverse its plan with the subsequent waste of funds which the city can ill afford.

The City and the surrounding area is presently experiencing unprecedented growth and the forecast is that this growth will continue, not only here but across the whole state for the next several years. CO-1 The present population within the Oldsmar service area and the East Lake service area, to which we are expected to provide service, is significantly in excess of that projected in the Pinellas County 201 Study.

CO-1. Comment noted.

The City is constantly approached by adjacent land owners wishing to annex their property into the City of Oldsmar. If we accept these properties into the City, we must be in a position to provide all municipal services, including wastewater treatment and disposal. We are unable to formulate plans for accomplishing this as long as the issue of wastewater treatment and disposal is not resolved.

Ronald J. Mikulak, Project Officer
Environmental Assessment Branch
N. Pinellas County EIS
June 24, 1985
Page Two

We attended the draft EIS presentation meeting on June 11, 1985, confident that at last we were going to receive some guidance from EPA regarding the service area we would be committed to serve and a recommended plan for effluent disposal which would allow us to proceed with resolving our current problems and provide direction for planning for our future wastewater needs. Unfortunately, that was not to be, and we left the meeting knowing little more than when we entered.

We have since reviewed the draft of the referenced document and would like to offer the following comments on behalf of the City of Oldsmar.

CO-2 The draft EIS provides absolutely no guidelines or recommendations for the City of Oldsmar. This is predicated on a statement on page 91 which says that the EPA will not recommend wastewater management alternatives for areas contiguous to waters which have not yet had an approved wasteload allocation study completed. This is because EPA does not want to recommend alternatives which may later not be in accord with these allocations. We certainly understand this position because we have been in that same position for several years, however, please realize that the lack of a plan for effluent disposal approved by FDER and EPA completely precludes our receiving any grant funding for correcting our existing problems.

CO-2. Comment noted.

It is our understanding that a draft version of the wasteload allocation study has been completed and that it will effectively preclude Oldsmar discharging into Upper Old Tampa Bay, including Mobbly Bay. The statements in the last paragraph of page 7 of the Draft EIS regarding denial of NPDES permits for facilities which discharge into Class II waters and which have also been classified as "Outstanding Florida Waters" would certainly apply to the Bay waters adjacent to Oldsmar. It, therefore, seems to be a rather shallow decision on EPA's part to avoid providing recommendations for the City of Oldsmar while waiting on the final version of a study which has a 99.9% chance of denying any discharge from the City of Oldsmar WWTP into the Bay.

To compound our concern, we are presently faced with a moratorium on connections to our existing wastewater treatment facility requiring Florida Department of Environmental Regulation's approval because of problems with our existing effluent disposal facilities. We withheld taking action to upgrade our existing facility and correcting our effluent disposal problems for several years waiting upon the completion of EPA and DER studies and we are now at the point where we have to do something now or shut down our City.

CO-3 We are, therefore, requesting that EPA immediately confer with the Florida Department of Environmental Regulation to resolve the wasteload allocation question and then provide the City with recommendations for

CO-3. EPA has reviewed the Draft Wasteload Allocation Report for Tampa Bay and provided comments to Florida DER. EPA will continue to work with DER until the Final Waste Allocation Report is submitted to and approved by EPA.

our wastewater management problem. If you will contact Mr. Steve Palmer, with FDER in Tallahassee, he will confirm our statements regarding the wasteload allocation matter.

We have worked patiently with the regulatory agencies for years waiting for direction and we have completely run out of time. We need direction immediately and will appreciate everything EPA can do to expedite providing such direction.

Sincerely,

Grace F. Williams
GRACE F. WILLIAMS, MAYOR
CITY OF OLDSMAR, FLORIDA

GFW/cdm

United States Department of the Interior
OFFICE OF ENVIRONMENTAL PROJECT REVIEW
Southeast Region / Suite 1360
Richard B Russell Federal Building
75 Spring Street, S.W. / Atlanta, Ga. 30303

Telephone 404/221-4524 - FTS 242-4524

[illegible] 24 1985

ER-85/656

Mr. Jack E. Ravan
Regional Administrator
Environmental Protection Agency
345 Courtland Street, NE
Atlanta, Georgia 30365

Dear Mr. Ravan:

The Department of the Interior has reviewed the draft environmental impact statement (EIS) for Wastewater Facilities, North Pinellas County, Florida, and has the following comments.

Known mineral resources in the project area include limestone, marl, shell, clay, and sand and gravel. In the past, limestone and sand and gravel have been produced. Local clay appears suitable for use as a light-weight aggregate and may have possible uses as fuller's earth.

Owing to non site-specific information in the DES, it is difficult to
assess impacts on mineral resources in the area. Still, because of
the increasingly urban nature of the project area and the inherent
restrictions that have already been placed on mineral development, the
impact on mineral resources near the proposed project would probably
be minimal. For completeness, however, subsequent versions of the DES
should describe mineral resources in the area and provide a statement
regarding impacts, if any, that would occur as a result of project
DOI-1 implementation. If no significant impacts are anticipated, then a
statement to that effect should be included.

DOI-2 The Fish and Wildlife Service supports effluent disposal methods which
eliminate discharges into estuarine habitat. The FWS agrees with your
DOI-3 assessment that wastewater reuse would be the environmentally
preferred disposal alternative. Other acceptable disposal methods
DOI-4 include deep-well injection and spray irrigation.

DOI-5 The statement should evaluate the effects of increased export of
ground water under the Gulf outfall alternative. We suggest that
DOI-6 monitoring during deep-well injection should include continuous
recording of pressures and injection rates for each injection well.

DOI-1. No significant impacts are anticipated.

DOI-2. Comment noted.
DOI-3. Comment noted.

DOI-4. Comment noted.

DOI-5. The "export" of groundwater from the Study Area is not limited to the Gulf outfall alternative, but is common to all surface water discharge alternatives. Surface water discharge is the current disposal practice for all but two discharges. A Gulf outfall alternative should, therefore, not be expected to significantly increase the level of "export" of groundwater beyond current levels.

DOI-6. Comment noted.

Monitoring pressures and injection rates will aid in early detection of accidental hydraulic fracturing, formation plugging, or breaks in the casing or injection piping.

Thank you for this opportunity to comment on this document.

Sincerely yours,

James H. Lee

James H. Lee
Regional Environmental Officer

U.S. Department of Housing and Urban Development
Atlanta Regional Office, Region IV
Richard B Russell Federal Building
75 Spring Street, S.W.
Atlanta, Georgia 30303-3388

JUL 1[illegible] 85

July 10, 1985

Mr. Ronald J. Mikulak, Project Officer
Environmental Assessment Branch
US EPA Region IV
345 Courtland Street, NE
Atlanta, GA 30365

Dear Mr. Mikulak:

Thank you for the opportunity to review and comment on the Draft EIS on North Pinellas County, Florida Waste Water Facilities. We have the following comments.

A. Wasteload Allocations:

The study area is approximately 90 percent sewered and reliance upon individual subsurface disposal of wastewater has been considerably less than in surrounding counties. The North Pinellas County area, being one of the fastest growing areas in Region IV continues to intensify demand for suitable housing and increased capability for approved public wastewater treatment and disposal. Existing facilities often operate at or above design capacity. Expansion of existing facilities resulting in large discharges of treated wastewater appears to be the least costly alternative but may not be possible when the assimilative capacity of surface waters is finally determined.

Deep well injection tests have occasionally revealed a clogging phenomenon which tends to raise technical doubts as to its viability in this area as an alternative. The Clearwater-East WWTP is under a permit compliance schedule deadline to cease all discharge to surface water by June 30, 1988, (Reference: Administrative Order 83163, dated March 25, 1985). Without the choice of a discharge of deep well injection, large areas of land may be required for spray irrigation.

The draft EIS is viewed as a welcome necessary step to provide a forum in which a comprehensive plan for the area may eventually evolve, however, until wasteload allocations are finally developed and the assimilative capacity of surface waters is actually known in some areas, a substantive elimination process may not be possible. In the meantime, pressures grow for increased capacity.

DOH-1 It is recommended that EPA seek to obtain a tentative DER timetable for the issuance of final wasteload allocations for all surface waters in the study area for incorporation into the planning process. (Reference: Section 208, PL 92-500) and NPDES permit compliance schedules where appropriate.

DOH-1. DER indicates the Tampa Bay wasteload allocation will be available later in 1985 and that the Clearwater Harbor - St. Joseph Sound final draft wasteload allocation will not be available until the middle of 1986.

B. Water Conservation:

On page XXIV, the EIS draft appropriately encourages water
conservation and indicates that, "local plumbing codes may require
DOH-2 revisions." It is recommended that those words be deleted unless it is
known specifically that that code would require revision. Many local
DOH-3 plumbing codes seem to allow additional water conservation devices. It
would be desirable if a sentence were added indicating that a county
ordinance is all that would be necessary for this very important low
DOH-4 cost/benefit concept. It is further recommended that this page refer to
possible energy savings possible from reduced daily consumption of hot
water. A smaller utility and electrical monthly bill over the mortgage
period is highly favored in HUD housing since such savings easily off-set
any relatively small initial costs. Maintaining a non-excessive water
pressure (20 psi at the tap) should be emphasized on this page as a
recommendation for water conservation equal to other water conservation
measures listed.

It is hoped that these comments are helpful during this EIS comment period.

Sincerely,

Ivar O. Iverson
Regional Environmental Officer

DOH-2. It is suggested that local plumbing codes are reviewed to ensure that water conservation requirements are consistent.

DOH-3. Page 19 of the Draft EIS refers to the 1983 state law.

DOH-4. Energy savings were addressed in the Alternatives Development Task Report.

STATE OF FLORIDA
Office of the Governor
THE CAPITOL
TALLAHASSEE 32301

BOB GRAHAM
GOVERNOR

July 25, 1985

JUL 29 1985

Mr. Ronald J. Mikulak
Project Officer
Environmental Assessment Branch
U.S. EPA - Region IV
345 Courtland Street, NE
Atlanta, Georgia 30365

Dear Mr. Mikulak:

This Office has submitted your agency's Draft Environmental Impact Statement, North Pinellas County, Florida Wastewater Facilities to state agencies for review and evaluation. Attached are comments from the Departments of Agriculture and Consumer Services, Community Affairs, Natural Resources, and State. We request that you consider their comments when preparing your final document for this project.

Sincerely,

Walt O. Kolb

Walter O. Kolb
Sr. Governmental Analyst

WOK/jkc

Attachments

An Affirmative Action Equal Opportunity Employer

STATE OF FLORIDA
FLORIDA DEPARTMENT OF AGRICULTURE & CONSUMER SERVICES
DOYLE CONNER COMMISSIONER ✱ 3125 CONNER BLVD. TALLAHASSEE 32301 Division of Forestry

May 10, 1985

Mr. Walter Kolb
Office of Planning and Budgeting
Office of the Governor
The Capitol
Tallahassee, Florida 32301

Dear Walt:

→ We have reviewed the EIS referral transmitted in your letter of April 25, 1985 on SAI Project #FL 8504231134E, North Pinellas County Florida Wastewater Facilities, and are advising you that the Division of Forestry has no adverse comment.

If we can be of further assistance, please give us a call.

Sincerely yours,

George

George L. Reinert
Chief, FREP Bureau
488-6591

STATE OF FLORIDA
DEPARTMENT OF
COMMUNITY AFFAIRS
DIVISION OF RESOURCE PLANNING AND MANAGEMENT

BOB GRAHAM
Governor

JOHN M. DeGROVE
Secretary

MAY 3 1985

MEMORANDUM

TO: Walter Kolb

FROM: Paul Darst PD

SUBJECT: FL 8504231134E, North Pinellas
Wastewater facilities

DATE: 2 May 1985

We have reviewed the referenced document and have no comment on it.

BUREAU OF LAND AND WATER MANAGEMENT
2571 EXECUTIVE CENTER CIRCLE, EAST • TALLAHASSEE, FLORIDA 32301 • (904) 488-4925

State of Florida
DEPARTMENT OF NATURAL RESOURCES

DR. ELTON J. GISSENDANNER
Executive Director
Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard, Tallahassee, Florida 32301

BOB GRAHAM
Governor
GEORGE FIRESTONE
Secretary of State
JIM SMITH
Attorney General
GERALD A. LEWIS
Comptroller
BILL GUNTER
Treasurer
DOYLE CONNER
Commissioner of Agriculture
RALPH D. TURLINGTON
Commissioner of Education

June 10, 1985

TO: Walt Kolb, Senior Governmental Analyst
Office of Planning and Budgeting

FROM: Dale Adams
Executive Staff Director

SUBJECT: Draft EIS for North Pinellas County
Wastewater Facilities FL8504231134C

Attached are comments on the referenced EIS, as provided by Frank Courtney of the Bureau of Marine Research. It should be clearly noted that from the shellfish sanitation perspective elimination of discharge is the best alternative.

DA/am

DIVISIONS / ADMINISTRATION BEACHES AND SHORES LAW ENFORCEMENT MARINE RESOURCES
RECREATION AND PARKS RESOURCE MANAGEMENT STATE LANDS

State of Florida

Department of Natural Resources

Interoffice Memorandum

DATE : May 20, 1985

TO : Dale Adams, Administrative Assistant
Division of Resource Management

FROM : Frank Courtney FC
Pinellas County Revegetation Coordinator
Bureau of Marine Research

SUBJECT : Review EIS - FL 8504231134E
North Pinellas County Wastewater Facilities

Enclosed please find my review on the above report. Let me know if you need additional information.

FXC:maw
Enclosure
cc: Charles F. Futch
David C. Heil
Karen A. Steidinger
Alan Huff

RECEIVED

-recycled paper-

REVIEW EIS - FL 8504231134 E
North Pinellas County Wastewater Facilities

The EPA Draft EIS report for Wastewater Treatment-Disposal Options for northern Pinellas County evaluated five basic wastewater disposal options; discharge to nearshore coastal waters, Gulf outfall, land application, deep-well injection and wastewater reuse.

Discharge to coastal waters is the wastewater disposal option currently utilized by the Cities of Clearwater (East, Marshall St., and Northeast Plants), Dunedin and Tarpon Springs. This method is the "least cost" alternative and results in the greatest degree of environmental damage due to continued degradion of water quality, losses of elements of the estuarine food chain and fisheries habitat declines in commercial and recreational fisheries yield including areas of shellfish harvesting, and restrictions to recreational contact.

The waters of Pinellas County are currently classified as Outstanding Florida Waters, the majority of which are Class II and as such the discharge of sewage effluent is not permitted. However, the "No Discharge" wasteload allocation established by DER hast yet not been enforced.

This policy should apply to extension of estuarine outfall as well as Gulf outfall. The Gulf outfall alternative is simply an environmental trade-off, substituting degraded estuarine water quality for degraded coastal water quality and has been inadequately studied with respect to the long term effects of continuous outfall and prevailing south or southwesterly wind conditions. Furthermore, the Gulf outfall alternative promotes development in environmentally sensitive lands by removing development constraints and discouraging environmentally preferred alternatives.

After formulation of North and Central Pinellas 201 wastewater facilities plans the EPA decided that a finding of "No significant Impact" could be issued for the Gulf outfall alternative. Consequently, I do not feel that further consideration should be given to primary or back-up discharges of secondarily treated wastewater to surface waters inshore or by Gulf outfall, as these methods would cause the continued decline of water quality at an increasing rate due to expanding population.

The EIS for North Pinellas County has identified Reuse as the "environmentally preferred" alternative for the disposal of 2° treated wasterwater in seven of the eight individual wastewater treatment plants. The eighth, the North Pinellas subarea has been identified as suitable for continued land application at the Innisbrook Country Club. (p. 92) To summarize the EIS recommendations: reuse is the only management option that responds to this region's surface water quality problems while addressing goundwater supply limitations. The advantages in wastewater reuse include:

1) potentially high public accetance,
2) reduced reliance on surface water discharges (and resultant water quality improvements) and

3) reduced strain on limited public groundwater supplies.

The disavantages are:

a) high cost (41-48 million dollars beyond surface water effluent discharge calculated for al eight WWTP's),
b) the need for wet-weather back-ups, and
c) operability considerations including soil variations and the need for maintenance at numerous dispersed sites, and
d) amount of wastewater reused is dependent upon private decisions and commitments.

The report goes on to state that although reuse is the environmentally preferred alternative, the "fundable alternative" will be selected following completion of wasteload allocation studies for Tampa Bay, Clearwater Harbor - St. Joseph Sound and Boca Ciega Bay.

The Tampa Bay Regional Planning Council has recently reviewed the draft Tampa Bay 205(j) Wasteload Allocation Study prepared by DER and found this document to be inadequate for making required management decisions. The Florida DER has already permitted discharges of secondarily treated effluent to the Anclote River by Tarpon Springs WWTP based on wasteload allocation studies of 6 mg/L BOD_5, 6 mg/L SS, 6 mg/L total nitrogen, and 3 mg/L of total phosphorus. These permitted values are in excess of those allowable for advanced wastewater treatment of 5 mg/L BOD_5, 5 mg/L SS, 3 mg/L total nitrogen, and 1 mg/L total phosphurus. Presently, secondary wastewater treatment is defined as removal of 90% of BOD and suspended solids.

Safety Harbor and Tarpon Springs WWTP's have been found in periodic violation of state secondary wastewater treatment standards and with closer monitoring other plants would be found at least in temporary violation.

In light of the unacceptable quality of the Tampa Bay Wasteload Allocation Study currently under review, it is unlikely that the Clearwater Harbor - St. Joseph Sound Wasteload Allocation Study will generate the type of data for EPA to determine "acceptable" levels for disposal of secondarily treated effluent to these surface waters. Likewise it is untenable that DER would consider it feasible to enforce these levels if they were thought to place undue economic burden on these WWTP's. We can no longer afford to sacrifice environmental quality for monetary convenience.

Deep-well injection is presently being considered for both primary and back-up effluent disposal in areas where there are 2 geologic confining layers separating deep stata of suitable transmissivity and storage capacity from the Florida Aquifer and the ground water table. The depth of this confining layer has been found to be less that 50 ft in the EIS Study Area, with the exception of the southwest portion (Clearwater Marshall St. WWTP). South of the Study Area, the depth of the confining layer exceeds 50 feet. This layer of impervious clay is occasionally perforated by fractures.

P. 82 "With the stipulation that deep-well injection only be permitted where a confining layer of at least 50 feet is present, impacts of injected wastewater on potable water supplies would

not be felt for many years, assuming the wastewater is not transported through any confining layer fractures. Even if pressure is available to push injected wastewater toward a potable supply, approximately 480 years would be required to push the wastewater through 50 feet of an unfractured confining layer, assuming the vertical hydraulic conductivity of the confining layer is 10^{-7} centimeters per second (which is typical for claylike formations)."

In this case EIS report implies that the danger of polluting the Floridan aquifer which has already been impacted due to drawdowns from excessive pumping and corresponding saltwater intrusion at a rate of 0.3 to 0.4 ft per year is simply a matter of time. While several generations may not feel the impact of such a decision we can not responsibly live with such a legacy. Thus, deep-well injection should be considered experimental and only utilized on an experimental trial basis. 28-month monitoring periods for deep-well testing using limited volumes of effluent (3.5 MGD) will not adequately address the environmental effects of this alternative.

Lastly, the area east of Lake Tarpon has been identified as environmentally sensitive due to very critical solids, low lying wetlands and floodplains which allow extensive groundwater recharge. Approximately 33% of this area is the Booker Creek drainage basin. For this reason neither land application or wastewater reuse should be considered. The most environmentally attractive alternative for this largely undeveloped area would be to transport wastewater from this area to the Clearwater Northeast WWTP. This should also be considered for the Oldsmar WWTP as periodic dike failures of evaporation-percolation ponds have found their way to Mobbly Bay.

DNR-1 Although this is just a draft report it appears that the primary concern of the EPA is the cost of the environmentally preferred alternative rather than the continued health, safety and quality of life available to the residents of the North Pinellas Region. DNR-2 The EPA, DER and DNR should collaborate to ensure the continued improvement of coastal, fresh and groundwater supplies. I would recommend that available federal funding be applied to the most environmentally sound alternative.

Frank Courtney/maw
May 20, 1985

DNR-1. The Draft EIS presents costs, environmental impacts and operation and implementation factors for all alternatives which were considered. The EIS has identified the environmentally preferred alternative and upon availability of approved wasteload allocations, EPA can select the most cost effective environmentally sound alternative.

DNR-2. Comment noted.

FLORIDA DEPARTMENT OF STATE
George Firestone
Secretary of State
DIVISION OF ARCHIVES,
HISTORY AND RECORDS MANAGEMENT
The Capitol, Tallahassee, Florida 32301-8020
(904) 488-1480

June 6, 1985

In Reply Refer to:

Mike Wisenbaker
Historic Sites Specialist
(904) 487-2333

Mr. Walter Kolb
Office of the Governor
The Capitol
Tallahassee, Florida 32301

RE: Your Memorandum of April 25, 1985
Cultural Resource Assessment Request
SAI NO. FL8504231134, Environmental Impact Statement,
North Pinellas County Florida Wastewater Facilities

Dear Mr. Kolb:

In accordance with the procedures contained in 36 C.F.R., Part 800 ("Procedures for the Protection of Cultural and Historic Properties"), we have reviewed the above referenced project for possible impact to archaeological and historical sites and properties listed, or eligible for listing in the National Register of Historic Places. The authorities for these procedures are the National Historic Preservation Act of 1966 (Public Law 89-665) as amended by P.L. 91-243, P.L. 93-54, P.L. 94-422, P.L. 94-458 and P.L. 96-515, and Presidential Executive Order 11593 ("Protection and Enhancement of the Cultural Environment").

A review of the Florida Master Site File and the National Register of Historic Places indicates the presence of 60 recorded sites within the North Pinellas Service area, with four of these 60 sites being listed in the National Register of Historic Places.

For this reason, we concur with the information contained in the EIS that interceptor lines, pump stations and spray irrigation fields may impact significant culture resources in this area.

Therefore, it is our recommendation that this office be provided copies of any final plans and/or alternatives plans so that we can assess the effects these projects will have on cultural resources in the project area.

If you have any questions concerning our comments, please do not hesitate to contact us.

Your interest and cooperation in helping to protect Florida's archaeological and historical resources are appreciated.

Sincerely,

George W. Percy
State Historic
Preservation Officer

GWP/Wkp

CHAPTER V
LIST OF EIS PREPARERS

PROJECT PERSONNEL

U.S. ENVIRONMENTAL PROTECTION AGENCY

Robert B. Howard	Chief, NEPA Compliance Section
F. Theodore Bisterfeld	EPA Project Officer, June 1979 - November 1983
Ronald J. Mikulak	EPA Project Officer, November 1983 - Present
Philip Vorsatz	North Pinellas 201, Project Engineer
Artie Buff	Central Pinellas 201, Project Engineer
Eugene Coker	Engineer, Water Supply Branch

GANNETT FLEMING CORDDRY AND CARPENTER, INC.

Thomas M. Rachford, P.E., Ph.D.	Senior Project Manager
Laurence E. Benander, P.E.	Project Manager
David B. Babcock, P.E.	Assistant Project Manager
James R. Fuller	Engineer
John W. Jacobs	Soils Scientist
Amy E. Lucas	Environmental Scientist
P. Andre DeGeorges	Environmental Scientist
W. Peter Wickwire, P.E.	Engineer

CTA ENVIRONMENTAL, INC.

Claude E. Terry, Ph.D.	President
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Thomas C. Mather	Environmental Scientist
James C. Hodges	Environmental Scientist

PINELLAS COUNTY PARK DEPARTMENT

Cover Photo of Brooker Creek Park Courtesy of the Department.

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